SSA-0412

USER GUIDE

4 Channel MPEG-4
Digital Video Recorder

Ver. 2.1



About this user guide

Before installing and using this unit, please read this user guide carefully.

Be sure to keep it handy for later reference.

This document contains preliminary information and subject to change without notice.

BEFORE INSTALLATION

- **NOTE: WE DO NOT TAKE ANY RESPONSIBILITY OF DAMAGES RESULTED FROM THE NON-STANDARDIZED GOODS AND FAILURES TO FOLLOW THE MANUAL INSTRUCATIONS.**
- **PLEASE ASK FOR HELP TO YOUR LAST SELLER BEFORE DISASSEMBLEING THE SYSTEM FOR REPAIR AND ADD PARTICULAR FUNCTIONS.**

FCC VERIFICATION

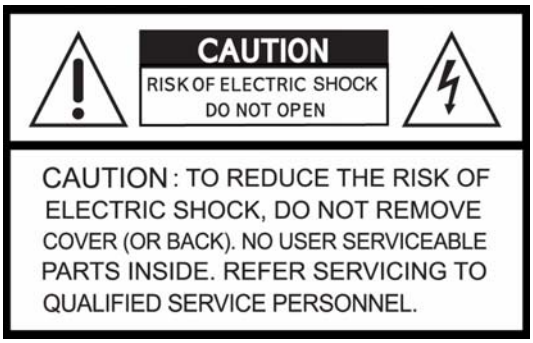
Caution: Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules.
These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.
Operation of this equipment is a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CE DoC (Declaration of Conformity)

Warning: This is a class A product.
In a domestic environment this product may cause radio Interference in which case the user may be required to take adequate measures.

SAFETY PRECAUTIONS



EXPLANATION OF SYMBOLS



This symbol is intended to alert the user to the presence of important operation and maintenance (servicing) instructions in the literature accompanying the appliance.



This symbol is intended to alert the user to the presence of unprotected “dangerous voltage” within the product’s enclosure that may be strong enough to cause a risk of electric shock persons.

CAUTIONS

THIS PRODUCT HAS MULTIPLE-RATED VOLTAGES (110V AND 220V).

SEE INSTALLATION INSTRUCTIONS BEFORE CONNECTING TO THE POWER SUPPLY.

THIS PRODUCT USES A LITHIUM BATTERY.

TO AVOID OF RISK OF EXPLOSION, DO NOT REPLACE THE BATTERY ON THE MAIN BOARD BY ANYTHING OTHER THAN A LITHIUM BATTERY. DISPOSE OF USED BATTERIES ACCORDING TO THE MANUFACTURER’S INSTRUCTIONS.

THIS EQUIPMENT AND ALL COMMUNICATION WIRINGS ARE INTENDED FOR INDOOR USE ONLY.

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THE UNIT TO RAIN OR MOISTURE.

WARNINGS

The product should be installed by a trained professional. The DVR should be powered off when connecting camera, audio, or sensor cables.

The manufacturer is not responsible for any damages caused by improper use of the product or failure to follow instructions for the product.

The manufacturer is not responsible for any problems caused by or resulting from the user physically opening the DVR for examination or attempting to fix the unit. The manufacturer may not be held liable for any issues with the unit if the warranty seal is removed.

RACK MOUNT INSTRUCTIONS

The following or similar rack-mount instructions are included with the installation instructions:

A) Elevated Operating Ambient - If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (Tma) specified by the manufacturer.

B) Reduced Air Flow - Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.

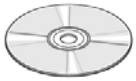
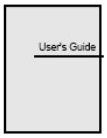
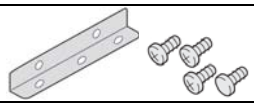
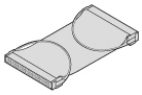
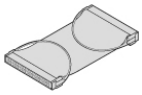
C) Mechanical Loading - Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.

D) Circuit Overloading - Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on over-current protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

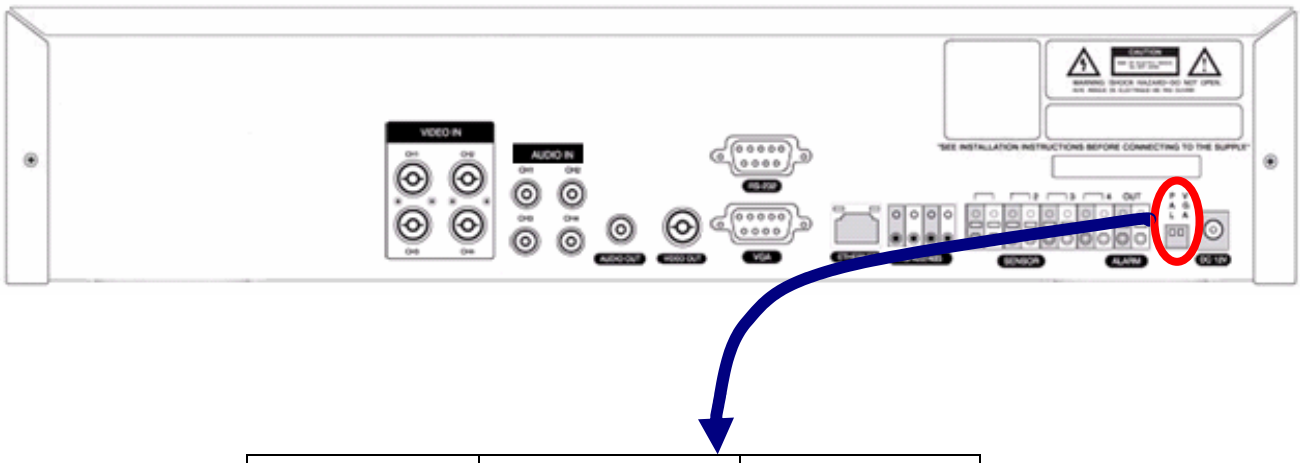
E) Reliable Earthing - Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g. use of power strips)."

CONTENTS OF DVR PACKAGE

The package contains the main unit and its components as specified below. When you purchase the unit, please check to ensure the components specified below are included.

DVR Set	
Client Software CD	
Remote Controller & Battery1.5V (AAA x 2EA)	
Adaptor (12V, 5A) & Power Cord (110V or 220V)	
User Guide	
HDD & CDRW Screw (8EA)	
HDD & CDRW Bracket Screw (8EA)	
Rack Mount (2EA)-(Option) & Rack Mount Screw (6EA)-(Option)	
IDE HDD Cable 80pin (1EA)	
IDE CDRW Cable 40pin(1EA)-(Option)	
Power Cable for HDD & CDRW	
HDD Brackets (1EA)	
CDRW Bracket(1EA)	

VIDEO SIGNAL SELECT / SETTING



SETTING	Video mode		Video output	
	NTSC	PAL	BNC	VGA
PAL VGA **Factory Default**	O	X	O	X
PAL VGA	X	O	O	X
PAL VGA	O	X	X	O
PAL VGA	X	O	X	O

NOTICE

Do not change the setting when the power is on.

When the position of the switch is changed, the DVR should be rebooted to apply the new setting.

COMPATIBLE HDD MODELS

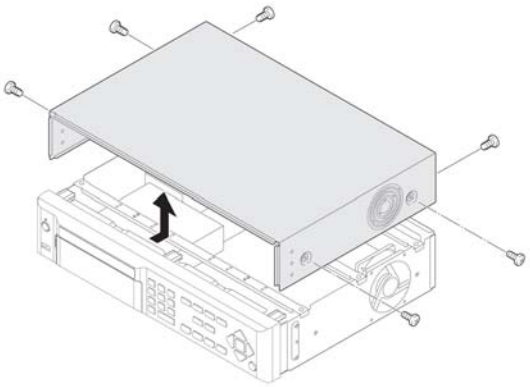
COMPANY	MODEL	SIZE	RPM	BUFFER	INTERFACE
HITACHI	HDS728080PLAT20	80 GB	7200 RPM	2 M	E-IDE
	HDS721680PLAT80	82 GB	7200 RPM	8 M	E-IDE
	HDT722516DLAT80	160 GB	7200 RPM	8 M	E-IDE
	HDT722516DLAT80	164 GB	7200 RPM	8 M	E-IDE
	HDS722525VLAT80	250 GB	7200 RPM	8 M	E-IDE
	HDT722525DLAT80	250 GB	7200 RPM	8 M	E-IDE
	HDT725025VLAT80	250 GB	7200 RPM	8 M	E-IDE
	HDT725032VLAT80	320 GB	7200 RPM	8 M	E-IDE
	HDS725050KLAT80	500 GB	7200 RPM	8 M	E-IDE
MAXTOR	6L300R0	300 GB	7200 RPM	16 M	E-IDE
SAMSUNG	SP0822N	80 GB	7200 RPM	2 M	E-IDE
	SP1604N	160 GB	7200 RPM	2 M	E-IDE
WESTERN DIGITAL	WD1600BB-22GUA0	160 GB	7200 RPM	2 M	E-IDE
	WD2000BB-00GUA0	200 GB	7200 RPM	8 M	E-IDE
	WD2500BB-00KEA0	250 GB	7200 RPM	8 M	E-IDE
	WD3200JB-00KFA0	320 GB	7200 RPM	8 M	E-IDE
	WD5000AAKB	500 GB	7200 RPM	16 M	E-IDE
SEAGATE	ST3400-15ACE	40 GB	7200 RPM	2 M	E-IDE
	ST3800-12ACE	80 GB	7200 RPM	2 M	E-IDE
	ST31200-25ACE	120 GB	7200 RPM	2 M	E-IDE
	ST31600-22ACE	160 GB	7200 RPM	2 M	E-IDE
	ST3300820ACE	300 GB	7200 RPM	8 M	E-IDE
	ST3300831ACE	300 GB	7200 RPM	8 M	E-IDE
	ST3400832ACE	400 GB	7200 RPM	8 M	E-IDE
	ST3400820ACE	400 GB	7200 RPM	8 M	E-IDE
	ST3500641A	500 GB	7200 RPM	16 M	E-IDE
	ST3750840ACE	750 GB	7200 RPM	8 M	E-IDE
	ST3750640A	750 GB	7200 RPM	16 M	E-IDE

NOTICE

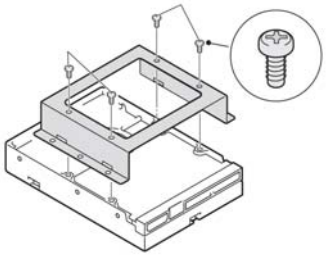
The brands and models of all HDD should be the same. If the brands and models of each HDD are different with others, the DVR could not recognize HDD.

HDD INSTALLATION GUIDE

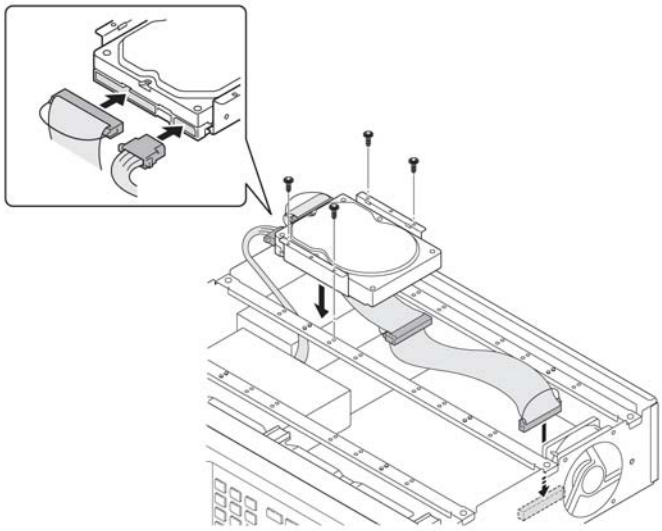
1. Unfasten the cover of the unit.



2. Fix the bracket to the hard disk using the supplied HDD mounting bracket screws.



3. Connect the supplied IDE HDD 80pin cable and Power cable to the hard disk and fix the hard disk to the unit the supplied HDD fixing screws.



4. HDD Jumper must set as MASTER

SPECIFICATION

VIDEO	INPUT	4 Composite BNC (NTSC/PAL) – 1.0Vp-p	
	OUTPUT (Selectable)	1 Composite BNC (NTSC/PAL) – 1.0Vp-p	
		1 VGA (D-sub 15 pin)	
AUDIO	INPUT & OUTPUT	4 Line In (RCA) & 1 Line Out (RCA)	
ALARM	INPUT & OUTPUT	4 & 1	
OS		RTOS	
RECORD	COMPRESSION	MPEG-4	
	VIDEO FORMAT	NTSC	PAL
	RESOLUTION	352x240, 704x480	352x288, 704x576
	RECORDING QUALITY	MAX. 120fps/4CH(352x240/CH) MAX. 30fps/4CH(704X480/CH)	MAX. 100fps/4CH(352x288/CH) MAX. 25fps/4CH(704X576/CH)
	MODE	By Manual, Motion, Sensor, and Schedule	
	METHOD	By Resolution, fps & Quality	
MULTI TASK	TRIPLEX	Record, Playback and Transfer via Network	
CONTROL UNIT		IR Type Remote Control and Front Keys	
SERIAL PORT	CONSOLE	1 RS-232C	
	CAMERA CONTROL	1 RS-485	
NETWORK	INTERFACE	ADSL, LAN	
	DYNAMIC IP	DDNS	
	LAN PORT	1 10/100-base T Ethernet	
	FUNCTIONS	Live, Search, P/T/Z/F	
HDD	CAPACITY	1EA Max. 500GB	
BACKUP	NETWORK	Still Image & Video data	
	USB STICK	Still Image & Video data	
	CDRW	Still Image & Video data	
POWER SPECIFICATION	EXTERNAL ADAPTOR	Input: AC100-240V, 50/60Hz, 1.5A, Output: DC 12V, 5A	
	CONSUMPTION	Normal 18W (12V, 1.5A)	
ENVIRONMENTAL SPECIFICATION	TEMPERATURE	5°C ~ 40°C	
	HUMIDITY	30% ~ 90%	
SIZE			

TABLE OF CONTENTS

1. FRONT PANEL AND REMOTE CONTROLLER 15

1-1. Front Panel 15

1-2. Remote controller 17

2. REAR PANEL AND CONNECTIONS 18

3. SETTING UP THE DVR 20

3-1. SETUP - Main Screen 20

3-2. Setup – DISPLAY Mode 22

3-3. Setup – RECORD Mode 23

3-3-1. Quick record setting 24

3-3-2 Motion Zones 25

3-3-3 RECORDING SCHEDULE 25

3-4. Setup – Device Mode 26

3-4-1. PTZ Setup 27

3-4-2. Motion Zone Setup 28

3-5. Setup – Storage Mode 28

3-6. Setup – System Mode 29

3-7. Setup – PASSWORD Mode 33

3-8. Setup – Network Mode 34

3-8-1. Ports 35

3-8-2. Network Types 36

3-8-3. Saving Setup of Network setup 38

3-9. Setup - CONFIG Mode 38

3-9-1.Saving Setup 40

4. LIVE & SEARCH 41

4-1. LIVE Screen 41

4-2. SEARCH screen 42

4-2-1. TIME LINE Search 43

4-2-2. EVENT Search 44

4-2-3. GO TO 45

4-2-4. GO FIRST 46

4-2-5. GO LAST 46

4-2-6. LOG List 46

4-2-7. ARCHIVE Search 47

4-3. PTZ operation 48

4-4. PLAYBACK mode 49

5. ARCHIVING VIDEO 51

5-1. Capturing and transferring still images or video onto USB or CD media. 51

5-2. Transferring still images or video from the ARCHIVE list 53

5-3. Playing AVI video from USB memory stick or PC through Network S/W 55

6. UPGRADING FIRMWARE 56

7. NETWORK – BY AN EXCLUSIVE VIEWER 57

7-1. Overview 57

7-2. Minimum PC requirements 58

7-3. Installing the program 58

7-4. Live viewer 59

7-5. Search and Playback Viewer 61

7-5-1. Backup 62

7-6. PC System configuration 62

7-6-1. General 62
7-6-2. Site 63
7-6-3. Event 63
7-6-4. Record 64
7-6-5. Disk 65

8. NETWORK – BY AN WEB-BROWSER VIEWER 67

8-1. Download Web Brower Viewer and Connection 67

8-2. Main Features 68
8-2-1. Live 68
8-2-2. Search and Playback 69

APPENDIX 71

1. HOW TO REGISTER DDNS (DYNAMIC DOMAIN NAME SERVER) 71

1-1. Setting of NETWORK Setup menu 71

1-2. Checking Mac address on the rear panel of DVR and Registration No. 71

1-3. Registration at DDNS. 72

2. NETWORK ACCESS USING DOMAIN NAME 73

1. Front Panel and Remote controller

1-1. Front Panel

The following information will help you operate the front panel controls.

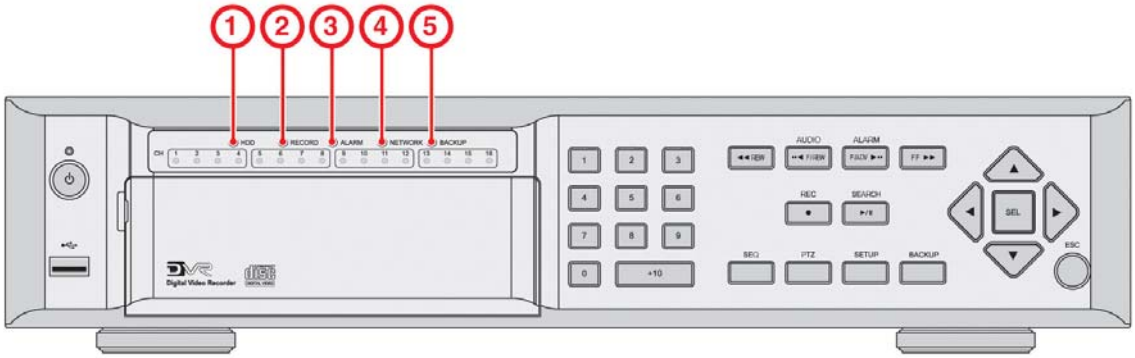


Figure 1.1 Front panel

Table1.1. Indication lamps

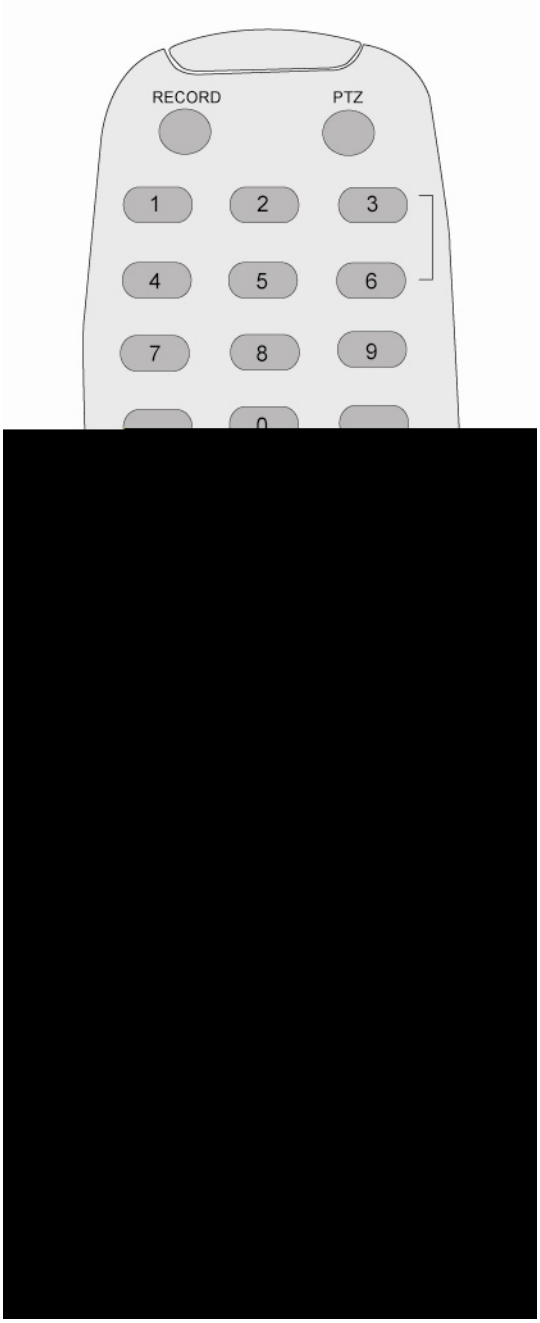
Name	Description
¬ **HDD**	LED light is on when the system is accessing the hard disk.
- **RECORD**	LED light is on when the system is recording video data.
Ⓡ **ALARM**	LED light is on when alarm sensor(s) is/are triggered or motion is detected.
¯ **NETWORK**	LED light is on when client is connected to the system through the network.
° **BACKUP**	LED light is on when USB or CDRW storage device is stored images or video.

Table 1.2. Front panel buttons

Name	Description
	POWER ON/ OFF. If a password is set for power off in the SYSTEM setup menu, the system will ask for the password when the power button is pressed. Default P/W is 1111.
	Channel keys. Select channel to be displayed in full screen mode.
SEQ	Enable/disable the automatic sequential display of channels in full screen and quad display mode.
PTZ	Controls Pan/Tilt/Zoom operations.
SETUP	Launch the SETUP menu.
BACKUP	Press to capture a still image in live more, or Press to archive still image or video data in

	playback mode.
	Press to rewind the footage at 1x, 2x, 4x, and 8x speed in playback mode.
	Press to select audio mode such as SINGLE, MIX and MUTE. MUTE- All of 4 channels. SINGLE- Highlighted channel only. MIX- All of 4 channels. Jump/Step backward. In playback mode, the playback position moves 60 seconds backward.
	Press to enable/disable ALARM operation. Jump/Step forward. In playback mode, the playback position moves 60 seconds forward.
	Press to fast forward the footage at 1x, 2x, 4x, and 8x speed in playback mode.
	Press to start or stop manual recording.
	Press to go to SEARCH menu in live display mode. Press to play and pause the footage in playback mode.
	Press to move up the menu in setup mode. It is also used as the number 1 when entering password.
	Press to move right in the menu or to change the values in setup mode. It is also used as the number 2 when entering password.
	Press to move down the menu in setup mode. It is also used as the number 3 when entering password.
	Press to move left in the menu or to change the values in setup mode. It is also used as the number 4 when entering password.
	Press to select desired menu item or to store the setup value in the setup menu.
	Press for temporary storage of the changed value or to return to the previous menu screen.
 USB Port	USB Port is located on the left side of the front panel. This USB port is used to archive footage into a USB storage device or upgrade firmware with USB 2.0 memory stick.

1-2. Remote controller



RECORD	Manual recording
PTZ	PTZ menu screen
NUMBER	Channel 1 to 0, To select DVR ID
SEARCH	Search menu screen
SEQUENCE	Sequence of Full screen view
SETUP	Setup menu screen
DIRECTION	Direction or number 1 to 4 To enlarge Highlighted channel
SELECT	Enter
ESC	Esc
F/REW	Jump 60 seconds backward
PLAY/PAUSE	Play/Pause
F/ADV	Jump 60 seconds forward
ARCHIVE	Archive data
REW	Rewind
FF	Fast Forward

2. Rear Panel and Connections

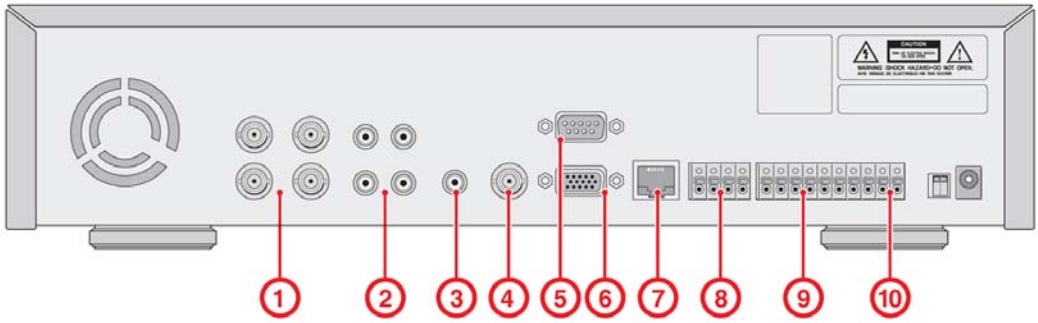


Figure 2.1. Rear Panel

Table 2.1. Rear panel connections

Connection	DESCRIPTION
¬ **VIDEO IN**	Four connectors for video input. Connect camera output to Video-in (NTSC/PAL)
- **AUDIO IN**	Four connectors for audio input.
Ⓡ **AUDIO OUT**	One connector for audio output.
¯ **VIDEO OUT**	Composite video output in NTSC or PAL format
° **RS-232**	For engineering use only
± **VGA**	Connector for VGA monitor
² **ETHERNET**	RJ45 connector for LAN connection
³ **RS-485/422**	For camera control use
´ **SENSOR IN**	Connector for sensor device connection. 4 sensors can be connected to the equipment sensor 1, 2, 3, 4 are dedicated to Video channel 1, 2, 3, 4, respectively. Either normal open (NO) or normal close (NC) sensor can be selected for each sensor. Simple On/Off switching.
µ **ALARM OUT**	Connector for alarm device connection. Provides simple On/Off switching using relay. 0.5A/125V, 1A/30V
DC INPUT	Apply 12V DC using the DC adaptor supplied with the equipment.
SWITCHES	
PAL	Set to ON position when video is PAL
VGA	Set to ON position when VGA monitor is used.

* Refer to the detail setting of video switch on Page 7 “Video Signal Select / Setting”.

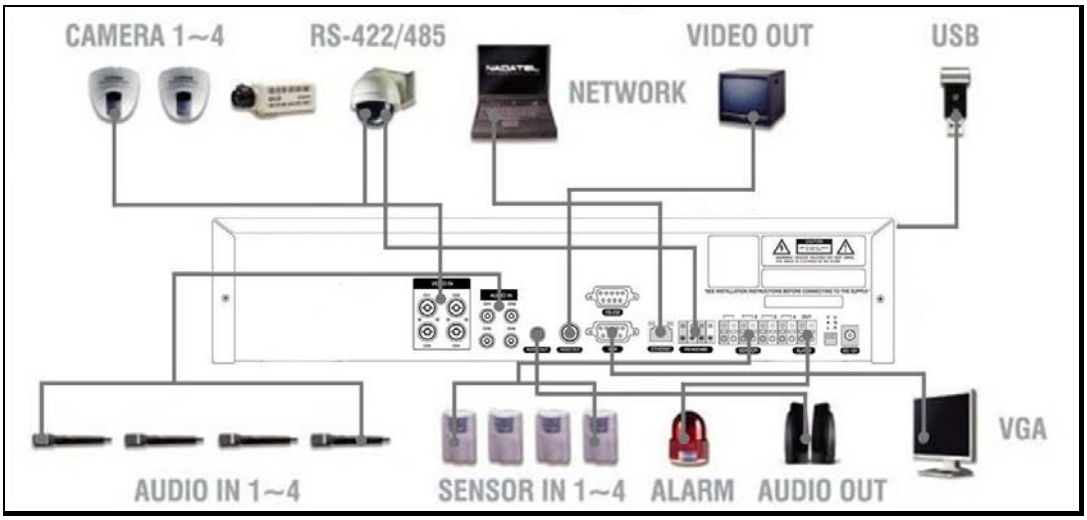


Figure 2.2. Rear Panel Connections

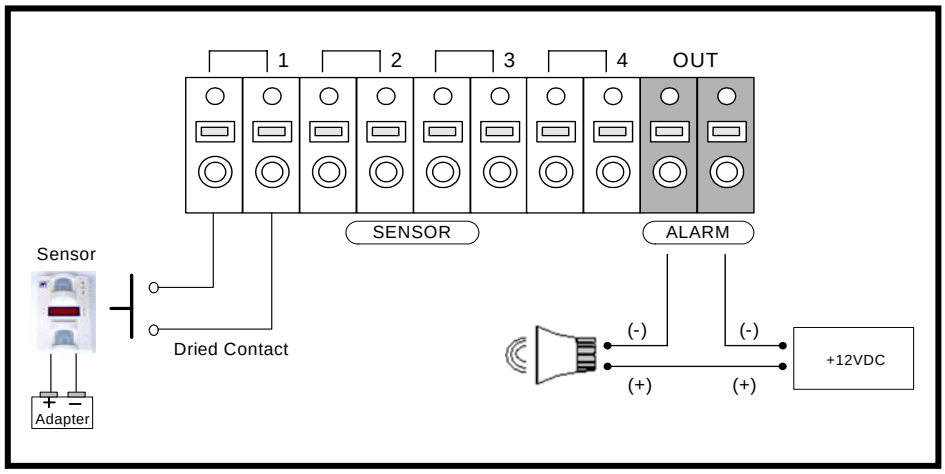


Figure 2.3. Sensor input / Alarm output connections

SENSOR INPUT: Connect two signal lines of sensor (infrared rays sensor, heat perception sensor, magnetic sensor) to the desired sensor number. (You can set the type-NC or NO- of sensor at “Setup” mode).

ALARM OUTPUT: Use this at 30V/300mA or less operating voltage and current. When controlling lamp and AC operated equipment, control it using separate outside relay. During normal operation the control output contact is maintained at “Open” status, and during control output the output contact is changed to Close(short)” status.

NOTICE

SENSOR inputs need dried contact only. Do not input any electric signal.

3. Setting up the DVR

The following sections detail the initial setup of the DVR

3-1. SETUP - Main Screen

When you press the SETUP button, the DVR will ask for a password (Figure 3.1.1). The default password is 1111, which can be entered by pressing the up button (^) 4 times and then pressing the SEL button. We recommend you protect the system by assigning a new password immediately. The procedure for assigning a password is found in section 3.4 SYSTEM. After a password has been assigned, enter the password by using the 4 direction keys (representing 1, 2, 3, & 4), and then press the SEL button for password validation. Once the password is entered, you will see the screen as shown in Figure 3.1.2. Navigate through the menu items and press the SEL button to enter the sub-category menu.

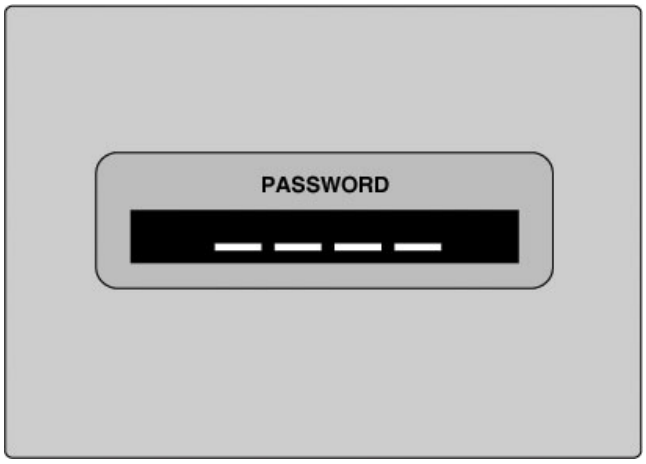


Figure 3.1.1. Password screen

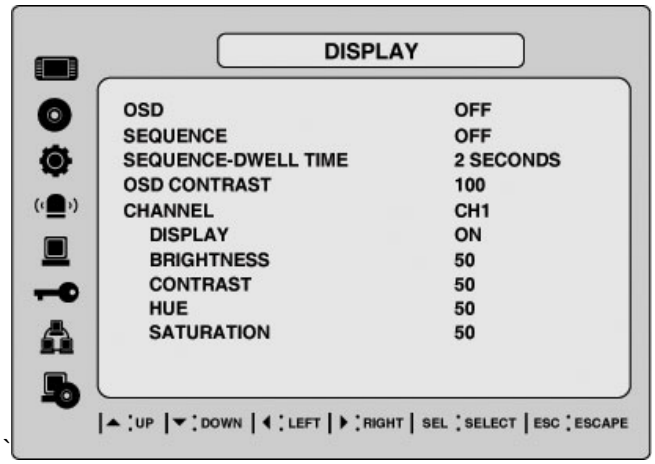


Figure 3.1.2. SETUP Main screen

Table 3.1.1. SETUP Menu configuration

- SETUP
  - DISPLAY
    - OSD
    - SEQUENCE
    - SEQ-DWELL TIME
    - OSD CONTRAST
    - CHANNEL - DISPLAY, BRIGHTNESS, CONTRAST, HUE, SATURATION
  - RECORD
    - RESOLUTION
    - CHANNEL — FRAME RATE, QUALITY, RECORDING, PRE RECORD, POST EVENT RECORD, AUDIO, SCHEDULE
  - DEVICE
    - PTZ – CHANNEL, NAME, SPEED, ID
    - CHANNEL – MOTION ZONE, MOTION SENSIVITY, SENSOR TYPE, ALARM, ALARM DURATION
    - KEYTONE
    - REMOTE CONTROL ID
  - STORAGE
    - OVERWRITE
    - DISK FORMAT
    - DISK INFORMATION
    - RECORDING LIMIT
    - RECORDING LIMIT DAYS
    - DELETE VIDEO AFTER
  - SYSTEM
    - DVR ID
    - DESCRIPTION
    - LANGUAGE
    - DATE FORMAT

- SET DATE & TIME – DAY LIGHT SAVING – USA, EU, OTHERS
- SEND MAIL – MAIL ADDRESS, M-SERVER NAME, RETURN MAIL ADDRESS
- P/WORD
  - ADMIN PASSWORD
  - NETWORK PASSWORD
- NETWORK
  - PORT
  - CLIENT ACCESS
  - BANDWIDTH SAVING
  - NETWORK TYPE – LAN, DHCP, ADSL
  - DDNS – DDNS NAME
- CONFIG
  - SAVE SETUP TO A USB
  - LOAD SETUP FROM A USB
  - LOAD DEFAULT

3-2. Setup – DISPLAY Mode

Set values for live display. Navigate through the menu items by pressing the UP/DOWN buttons.

The value of the menu item may be changed by pressing the LEFT/RIGHT buttons.

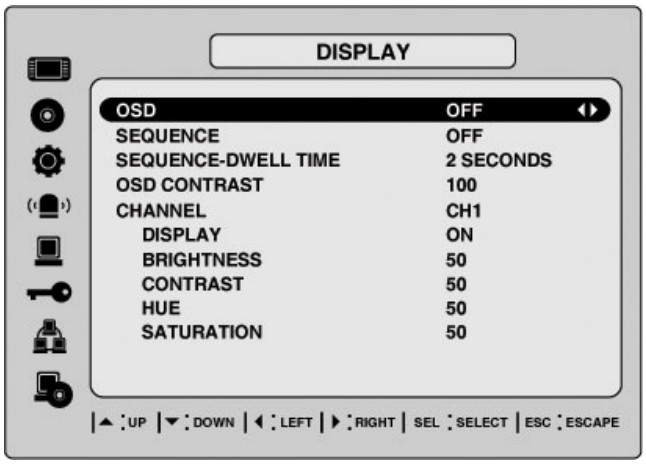


Figure 3.2.1. DISPLAY mode setup screen

Table 3.2.1. Menu items in DISPLAY mode setup

ITEM	DESCRIPTION
OSD	Enable/disable on-screen-display.
SEQUENCE	Enable/disable sequential display of video channels in full screen mode
SEQ-DWELL TIME	Dwell time for each cannel display in sequential display mode
OSD CONTRAST	Set the visibility level of the On Screen Display (OSD)
CHANNEL	Select the channel for applying the following settings.
DISPLAY	Enable/disable display of the video channel in live display mode
BRIGHTNESS	Change the brightness value for the specified channel

CONTRAST	Change the contrast value for the specified channel
HUE	Change the hue value for the specified channel
SATURATION	Change the saturation value for the specified channel

3-3. Setup – RECORD Mode

Set the values for recording video. Navigate through menu items by pressing the UP/DOWN buttons. User can change the value of the menu item by pressing the LEFT/RIGHT buttons.

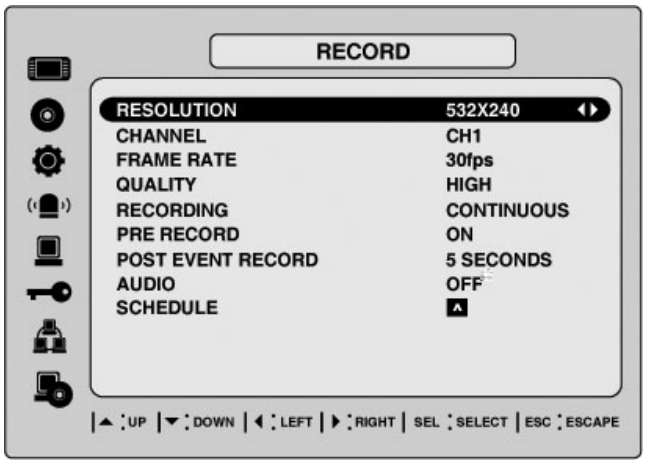


Figure 3.3.1. RECORD mode setup screen

Table 3.3.1. Menu items in RECORD mode setup

MENU ITEM	DESCRIPTION
RESOLUTION	Set resolution to either full or quad.
CHANNEL	Select the channel for applying the following settings.
FRAME RATE	Set the frame rate for the specified channel. The sum of the frame rate values from each channel cannot exceed maximum frame rates for a particular recording resolution. **Typical values of the maximum frame rate for NTSC video are 120/100fps for QUAD (352*240(NTSC)/352*288(PAL)) and 30/25 fps for FULL (704*480(NTSC)/704*576(PAL)).**
QUALITY	Select the recording quality for the specified channel from LOW, NORMAL and HIGH
RECORDING	Assign the recording mode for each channel. Recording modes: Continuous, Motion, Sensor, Schedule and Disable.
MOTION ZONE	Select Full Zone or Partial Zone for motion sensing. If the Partial Zone is selected, screen will be change as shown in figure 3.3.2.

MOTION-SENSITIVITY	Set the motion sensitivity for the specified channel. Control the motion sensitivity from 1 to 9.
SENSOR TYPE	Set the type of sensor for the specified channel from none, N/O (normal open), and N/C (normal closed).
PRE RECORD	Enable/disable pre-event recording. Pre-event recording time is 5 seconds and only intra-frames are recorded for pre-event recording.
POST-EVENT RECORD	Set post event recording time duration for the specified channel (1~30 seconds)
ALARM	Enable/disable alarm generation for the specified channel.
ALARM DURATION	Set alarm time duration for the specified channel. (1~60 seconds)
AUDIO	Enable/disable audio for the specified channel
SCHEDULE	Set recording schedule. If this menu item is selected, screen will change as shown in figure 3.3.3.

3-3-1. Quick record setting

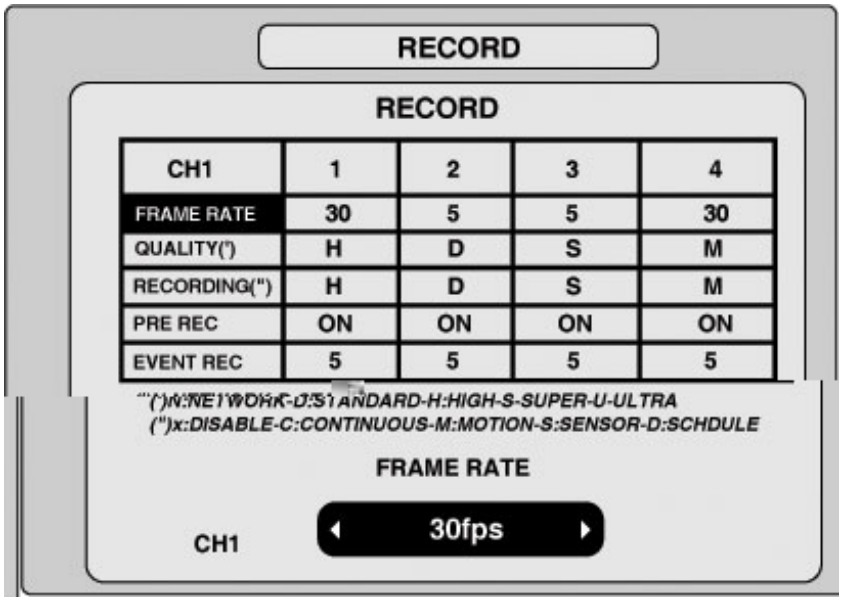
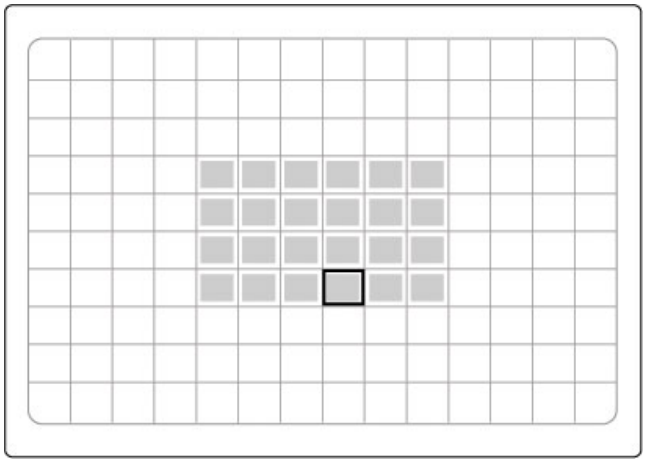


Figure 3.3.2 Quick RECORD setting screen

3-3-2 Motion Zones

By selecting Partial Zone in the Motion Zone menu, users can set-up the motion sensing zones in the screen shown in figure 3.3.2. Move around each rectangular zone using 4 direction key buttons and press SEL button to include the rectangular region as part of the motion sensing zone. The rectangular blocks included as part of the motion zone are indicated by changing the color of the blocks.



Selected Zones

SYMBOL	MEANING
C	Continuous recording mode
M	Motion detection triggered recording mode
S	Sensor triggered recording mode

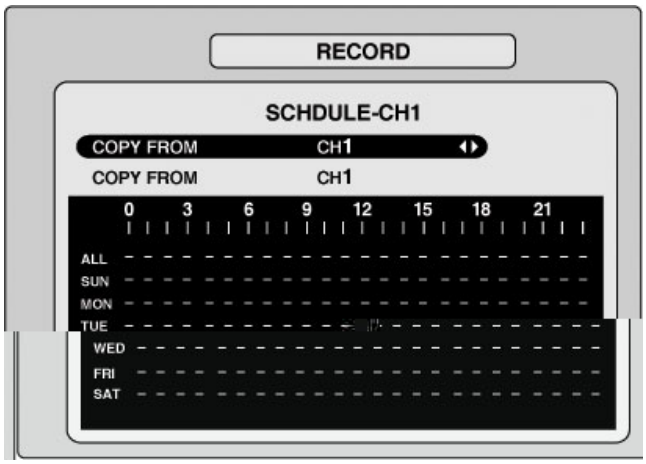


Figure 3.3.3. SCHEDULE Recording setup screen

3-4. Setup – Device Mode

To set values for device, use the UP and DOWN controls to navigate through the menu items. Change the value of the menu item using the LEFT and RIGHT controls.

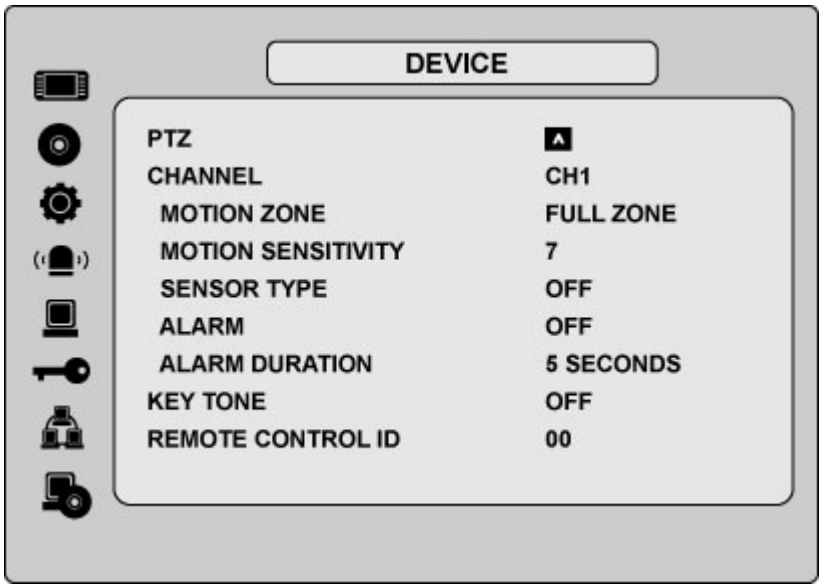


Figure 3.4.1. Device mode setup screen

Table 3.4.1. Menu items in Device Setup screen

Item	Description
PTZ	Set the PTZ camera speed, number, type and ID.
CHANNEL	Select specified channel for motion zone and sensor/alarm setup.
MOTION ZONE	Select Full Zone or Partial Zone for motion sensing.
MOTION SENSITIVITY	Set the motion sensitivity for the specified channel. Control the motion sensitivity from 1 to 9.
SENSOR TYPE	Set the type of sensor for the specified channel. Options are: None, N/O (normal open), and N/C (normal closed).
ALARM	Select alarm from 1 to 4.
ALARM DURATION	Set the dwell time of alarm from1 to 60seconds.
KEY TONE	Enable/disable key tone.
REMOTE CONTROL ID	Select an ID of remote control. 1. Select ID. 2. Press the same number as ID set in DVR on a remote controller. 3. Then  icon will be displayed on Live screen of DVR that respond to the remote control.

3-4-1. PTZ Setup

To control the PTZ functions of the camera, connect the controller to the RS-485 port.

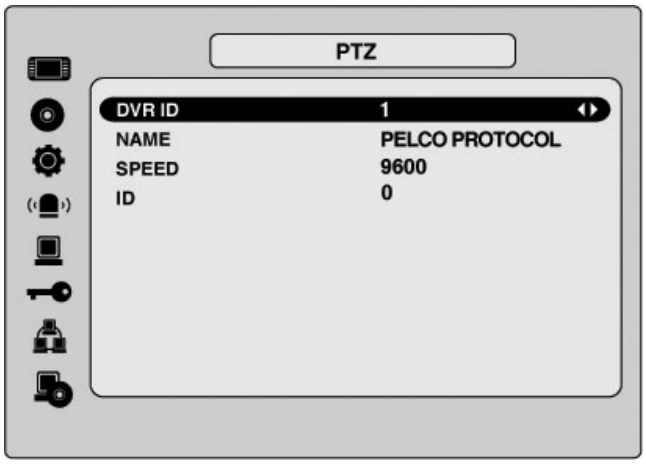


Figure 3.4.2. PTZ Control Setup Screen

Note: For speed dome cameras that support RS-485, connect them directly to the RS-485 port. If the camera is controlled with RS-232C, use an RS-485 to RS-232C signal converter.

On the PTZ control Setup screen, you can select or set the protocol type of the camera that is the same as the one installed on the site. If the camera has a specific camera ID, select the camera ID using the LEFT and RIGHT arrow controls.

The following options are available on the PTZ control screen.

CHANNEL (channel number that the PTZ is connected to)

NAME (protocol type)

SPEED (19200, 14400, 9600, 4800, 2400)

ID (0-63)

3-4-2. Motion Zone Setup

When you select Partial Zone in the Motion Zone menu, you can set-up the motion sensing zones in the screen. To move around each rectangular zone, use the arrow controls. Press the SEL button on each rectangular zone you want to include as part of the motion sensing zone.

If you select each zones, the color changes. Press ESC button to return to the DEVICE menu.

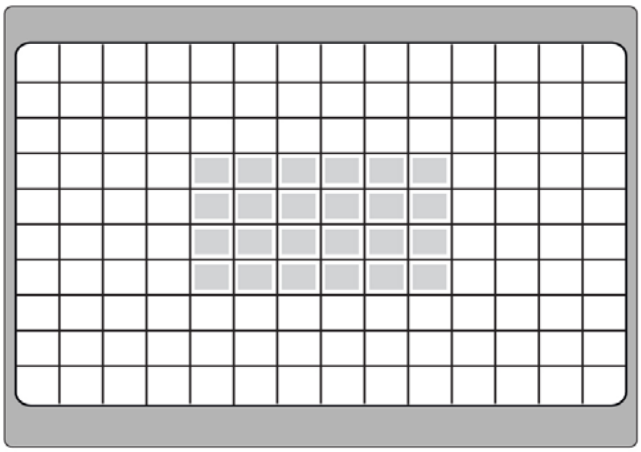


Figure 3.4.3. Motion Zone selection screen

3-5. Setup – Storage Mode

Set the storage parameters in the Storage setup screen.

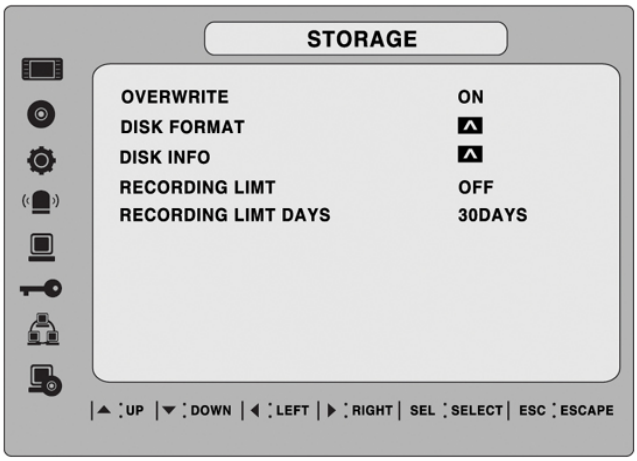


Figure 3.5.1. STORAGE setup screen

Table 3.5.1. Menu items in STORAGE Setup screen

Item	Description
OVERWRITE	When enabled, the DVR will continue recording and overwrite the oldest existing recorded data once the hard drive is full. When disabled, recording will stop once the hard drive is full.
DISK FORMAT	Format the hard drive. Use the UP and DOWN arrow buttons to select ON, then press SEL. You then have the option to YES or NO. Caution All recorder data will be lost. We recommend that you archive any data that you may need in the future before you format the hard drive.
DISK INFO	Hard drive information
RECORDING LIMIT	Enable/disable recording limit.
RECORDING LIMIT DAYS	Set the limit days for recording to the hard disk drive from 1 to 60 days.

3-6. Setup – System Mode

Use the System Setup screen to input system parameters.

Use the UP and DOWN arrow controls to navigate through the menu items and use the LEFT and RIGHT arrow controls to change the value of the menu items.

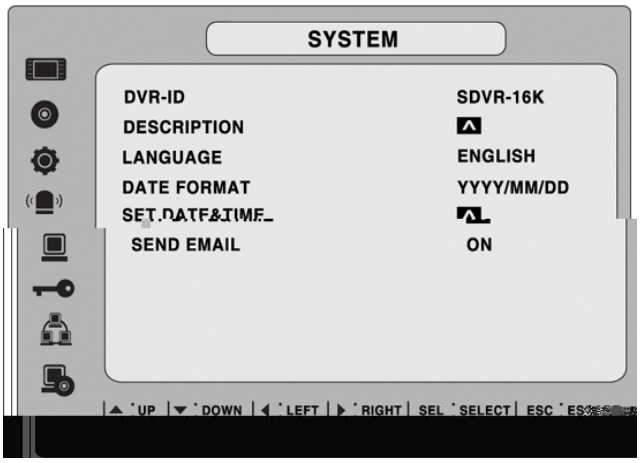


Figure 3.6.1. SYSTEM Setup Screen

Table 3.6.1. Menu items in SYSTEM Setup screen

Item	Description
DVR ID	Set the name of the DVR. Press the SEL button, use the LEFT and RIGHT or UP and DOWN arrow controls to navigate through the position for each alphanumeric character and Press SEL to apply the selected character. And Press OK to confirm the name. SPACE / Caps Lock(Select either Capital or Lower letter) BS(Back space: Erase previous character) / Clear(Erase all characters)
DESCRIPTION	Press SEL to view system information. (System version, storage capacity, IP address and MAC address.)
LANGUAGE	Set the desired language.
DATE FORMAT	Set the desired date and time display format. Options are: YYYY/MM/DD MM-DD-YYYY DD-MM-YYYY
SET DATE&TIME	Set the present date, time and daylight saving for the DVR.
	DATE & TIME Set the present date and time for the DVR. Press SEL, then use the LEFT and RIGHT arrow controls to navigate through the position of each alphanumeric character in the date and time. Use the UP and DOWN arrow controls to change the selected character. Press ESC and select YES to confirm the new date and time.
	DAY LIGHT SAVING Set the DLS (Daylight Saving) for the area. The options are: USA EU Others OFF. 1. USA (DLS time is applied automatically when being on the DLS time zone and is displayed on the current time) 2. EU (Set the GMT area for DLS time apply on the current time) - GMT AREA +00:00 3. OTHERS - BEGIN (MAR/1ST/SUN/00H) - END (SEP/1ST/MON/00H) (Set the BEGIN and END time for the specific area except EU and USA) use the

	UP and DOWN arrow controls to change the value of month, week, day and hour. **CAUTION:** -Do not set the start time to 23:00 for DLS. -DLS can't be applied, if the date of BEGIN and END is same.
SEND EMAIL	Enable/disable SEND EMAIL function. **IP NOTIFICATION:** Enable/disable sending daily e-mail reports on the status of your DVR. **EVENT ALARM:** Enable/disable sending e-mail reports when event alarm occurs. **MAIL ADDRESS:** Enter the appropriate email address to enable sending daily e-mail reports. **MAIL SERVER NAME:** Enter the appropriate email server information to enable sending daily e-mail reports. **ID:** Enter the ID of mail address. **PASSWORD:** Enter the password of mail address. **RETURN MAIL ADDRESS:** Enter the e-mail address for return email. When e-mail does not deliver or not work properly, the return email will be delivered to this e-mail address.

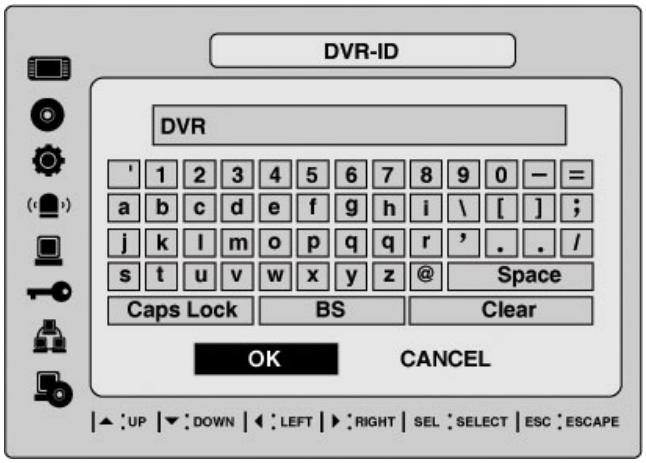


Figure 3.6.2. DVR ID Setup Screen

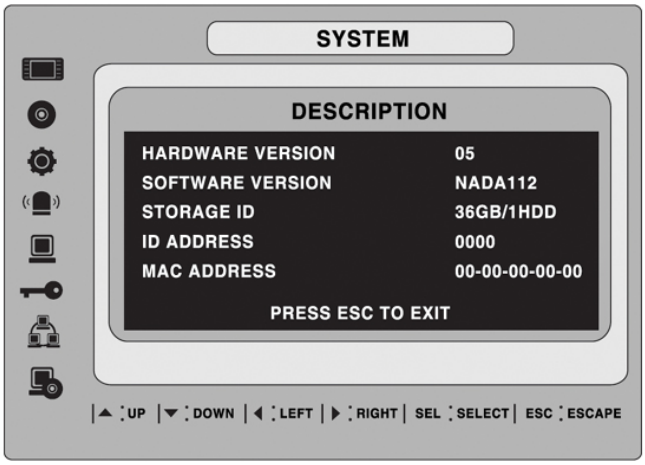


Figure 3.6.3.DESCRIPTION Screen

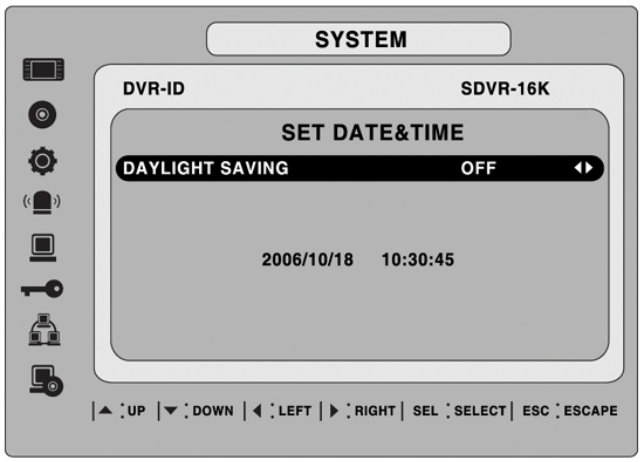


Figure 3.6.4.SET DATE & TIME Setup Screen

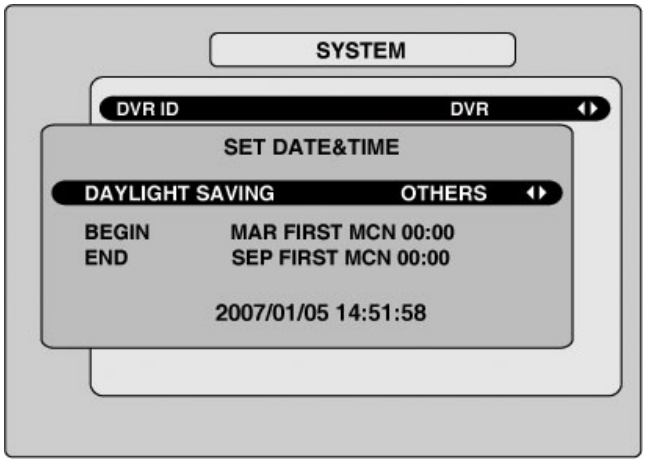


Figure 3.6.5.DAYLIGHT SAVING Setup Screen

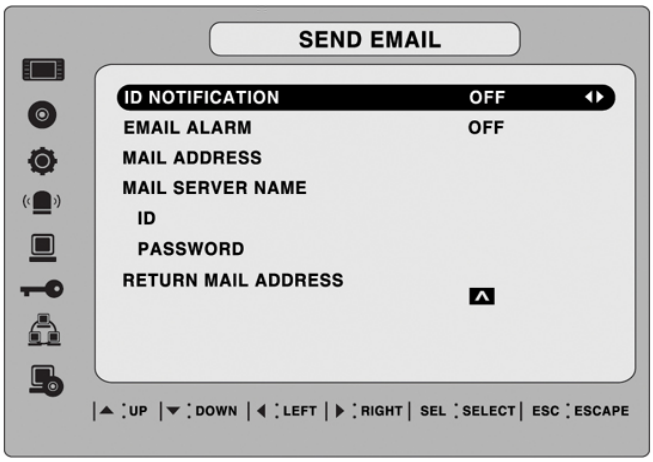


Figure 3.6.6.SEND MAIL Setup Screen

3-7. Setup – PASSWORD Mode

Use the LEFT or RIGHT and UP and DOWN arrow controls to set the password.

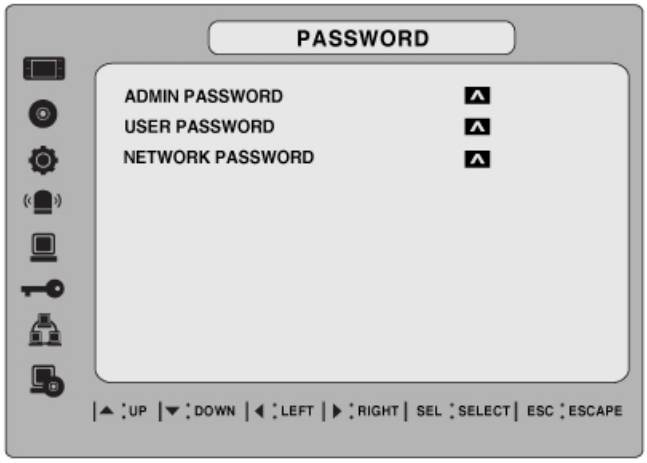
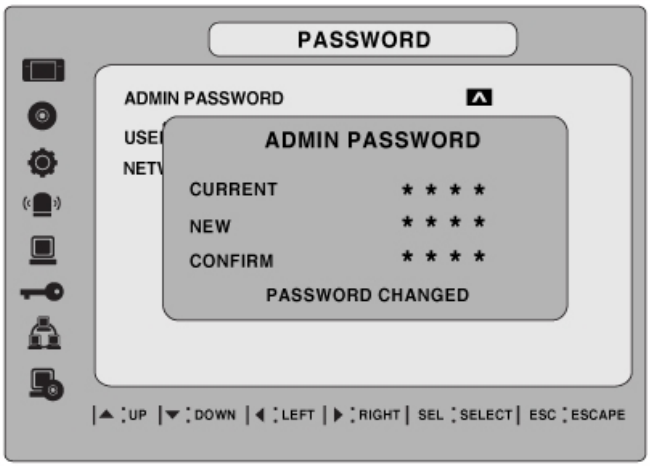


Figure 3.7.1. PASSWORD setup screen

Table 3.7.1. Menu Items in PASSWRORD Setup Screen

Item	Description
ADMIN PASSWORD	Set the administrator password. After selecting this menu item you will be promoted for your current password and then the new password. Follow the prompts to change and confirm the new password.  The default password is 1111. Use the arrow controls to change the password. UP=1 RIGHT=2 DOWN=3 LEFT=4 Admin password is asked for the following functions. Setup, Power, Search, and Key Lock from remote control.
NETWORK PASSWORD	Set the remote access password. You will need to enter this password

	when connecting to this DVR through the client software program. After selecting this menu item you will be prompted for your current password (the default password is 1111) and then the new password. Follow the prompts to change and confirm the new password. Use the arrow controls to change the password as described in ADMIN PASSWORD above.

3-8. Setup – Network Mode

Set up your network parameters on the Network Setup screen.

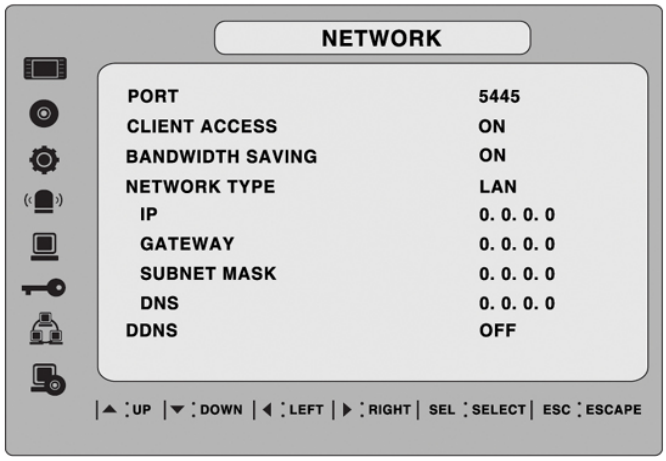


Figure 3.8.1. NETWORK setup screen

Table 3.8.1. Menu items in Network Setup screen

Item	Description
PORT	Port number (Default: 5445)
CLIENT ACCESS	Enable/Disable remote access through client software.
BANDWIDTH SAVING	Enable/Disable only key frame transmission. “ON” mode is favorable for use of low network bandwidth. Mostly, set “OFF” for normal use.
NETWORK TYPE	Set the type of network connection. Options are: LAN, DHCP, ADSL Note. Other parts of the Network Setup screen change depending on what network type you select.
DHCP	Sets to use HDCP (If this is selected, DVR automatically get IP varying from time to time from network.)
ADSL (PPPoE)	ID: Registered ID is necessary for ADSL connection. Password: Registered password is necessary for ADSL connection.
LAN	IP: Register IP address that is assigned for DVR. Gateway: Register Gateway that is assigned for DVR.

	Subnet Mask: Register Subnet Mask that is assigned for DVR.
DDNS	Enable/disable using domain name address through DDNS server. "ON" mode, DDNS server name appears for domain registration. The DDNS sever name is **ns.standalone4ch.com.** **CAUTION**: Do not change this sever name. If this is changed, the DDNS service cannot be used. **Registration** Check the MAC address of DVR from Setup>System>Description. Please contact a distributor or an installer to register your DVR on a DDNS Server. Register the domain name on DDNS Server. After the domain name and MAC address of the DVR are registered on a DDNS server, user can access the network with their own domain name.

3-8-1. Ports

When you connect one or more DVRs to a network through an IP sharing device, each device must have a unique TCP port number for access to each unit from outside the LAN. Also, the IP sharing device must be configured for port forwarding so when each port is accessed on the IP sharing device, it will forward to the appropriate DVR.

Note: This port number is listed next to the Port menu option in the Network Setup screen. If you plan to access the DVR units only from within the same LAN, the TCP port does not have to be changed.

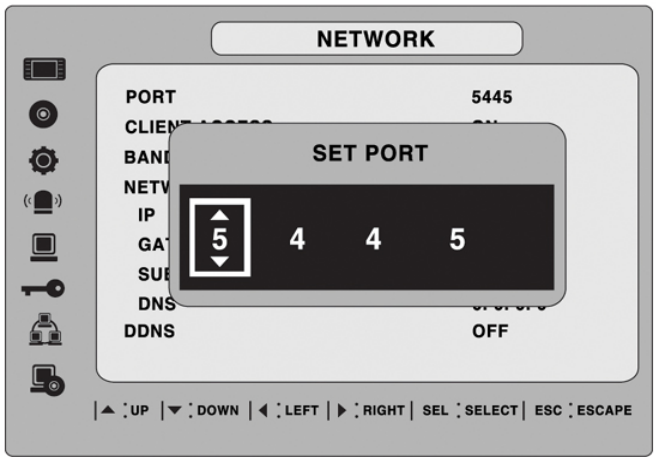


Figure 3.8.1. Network setup screen - PORT

Network access beyond a router

In order to access the DVR remotely beyond a router (firewall), the user must open one TCP port for command level, live channels and storage channels. If this port is not opened properly, user can not access DVR beyond a router.

If the DVR port number is set to 5445, open the TCP port 5445 on the router.

3-8-2. Network Types

3-8-2-1. LAN

1. Regarding to the use of fixed IP please ask your network administrator if you do not have this information.

2. When DVR is installed in IP sharer that is connected with ADSL, a user can assign fixed IP to DVR from IP sharer itself using “DMZ” function out of such sharer.

Input IP set in DMZ on “IP” field and Gateway of ADSL modem on “Gateway” field. Similarly, for Subnet Mask, DNS address, input relevant values in IP sharer.

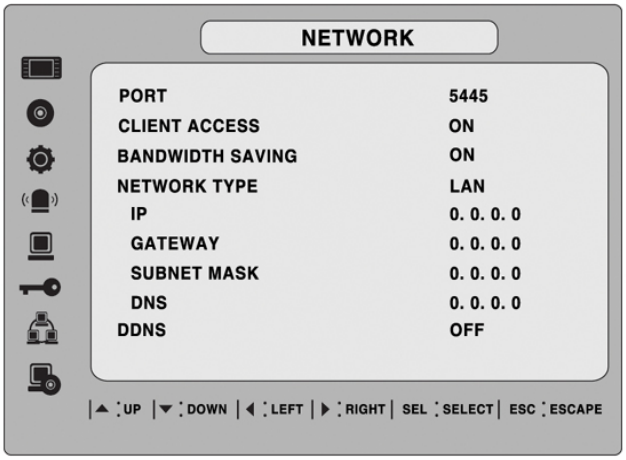
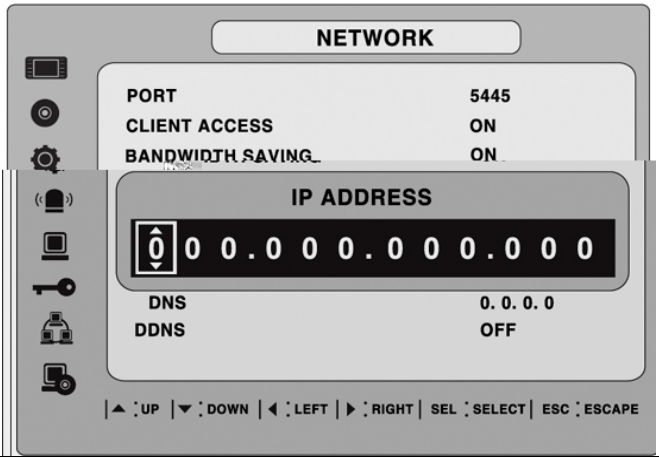


Figure 3.8.2. Network setup screen - LAN

Table 3.8.2. LAN

Item	Description
IP	The fixed IP address of the DVR unit 

GATEWAY	The IP address of the Gateway
SUBNET MASK	The subnet mask for the LAN
DNS	The address for the DNS server

3-8-2-2. DHCP

An IP address is automatically assigned by the DHCP server, which automatically assigns IP address and other parameters to new devices.

When ADSL or other network being used adopts variable IP method, not fixed IP. This option is used as a way to automatically get IP address.

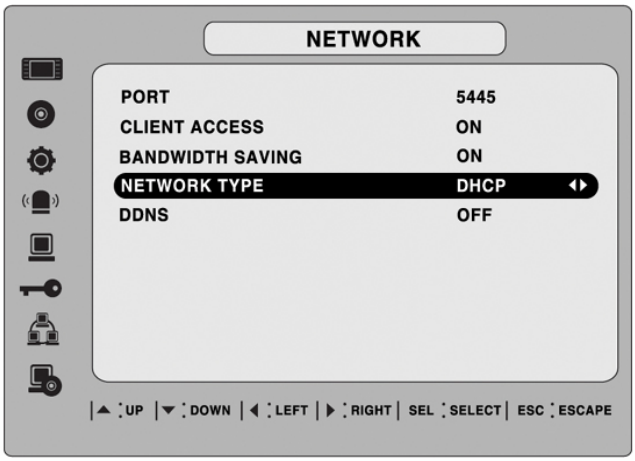


Figure 3.8.3. Network setup screen - DHCP

3-8-2-3. ADSL (PPPoE)

Use this ADSL (PPPoE) function when the network type connected to the DVR is PPPoE method.

If ADSL type is not using inputting IP and Password like VDSL or DVR is installed in IP sharer, a user can not select this function. In this case, a user should select DHCP or LAN.

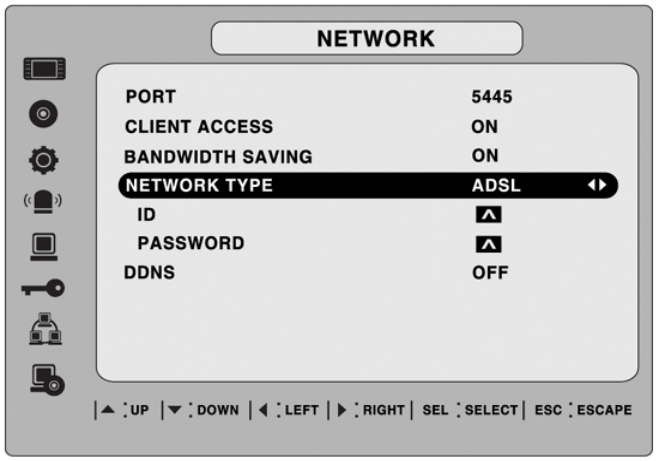


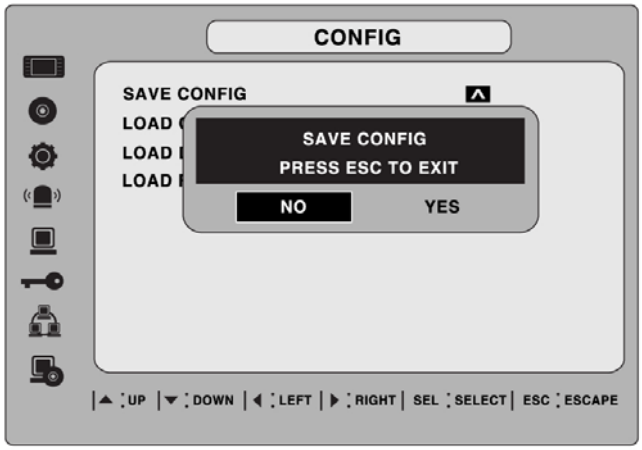
Figure 3.8.4. Network setup screen - ADSL

Table 3.8.3. ADSL

Item	Description
ID	The user ID for the ADSL connection
PASSWORD	The password for the ADSL connection

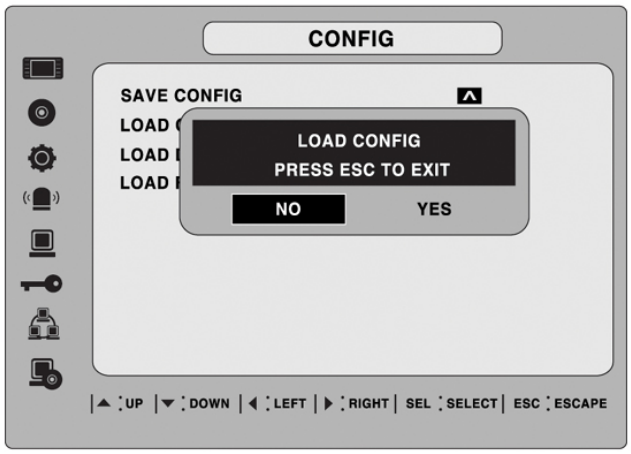
3-8-3. Saving Setup of Network setup

After changing the network configuration, confirmation



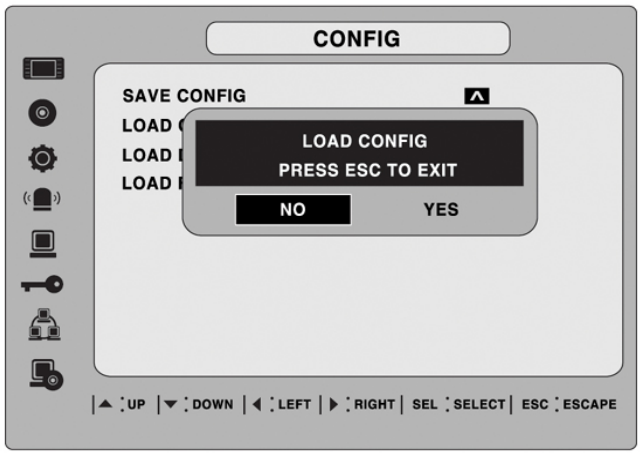
LOAD CONFIG

User can upload the configuration of DVR to another DVR using the USB Memory stick. Put the USB stick on the front panel and press SEL to start the loading process.



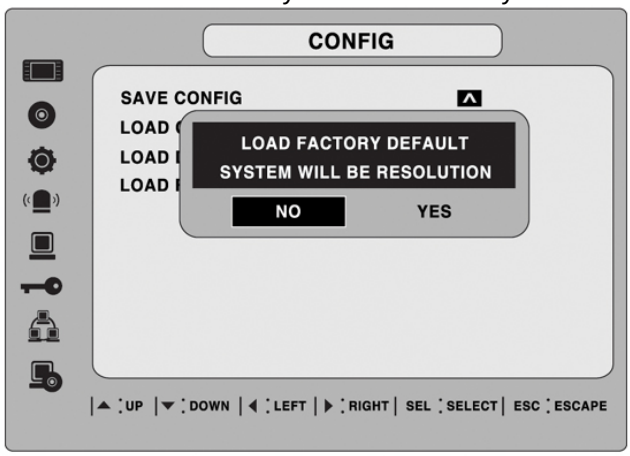
LOAD DEFAULT

Select ON to reset the system to the default settings.



(Password, date format, DLS, Network setting, and HDD Overwrite will not be included.)

LOAD FACTORY DEFAULT	Select ON to reset the system to the factory default settings.



3-9-1.Saving Setup

To preserve the setup values that you have selected, select YES.

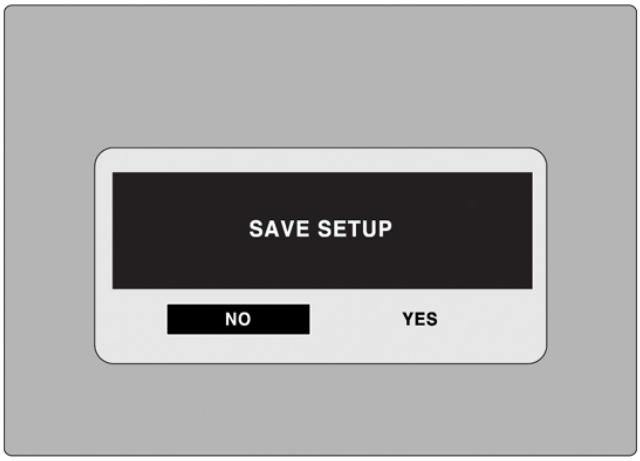


Figure 3.9.2. SAVE SETUP screen

4. LIVE & SEARCH

4-1. LIVE Screen

In the LIVE screen, video inputs from the cameras are displayed on the configuration of the live setup. Figure 4.1.1 shows the layout of the live screen. Various indicators showing the status of the DVR are shown as OSD symbols. Refer to Table 4.1.1 for the meanings of the indicators.

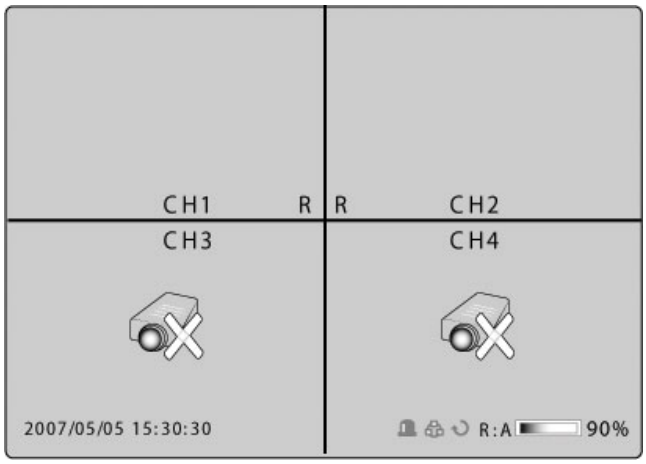


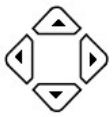
Figure 4.1.1. LIVE display screen

Table 4.1.1. Indicator ICONS in LIVE screen

INDICATOR	DESCRIPTION
	Continuous recording in progress.
	Manual recording in progress. To set the Manual recording mode, press the Record button on the front panel.
	Motion alarm recording in progress.
	Audio mute. To set audio mute, press the Audio button on the front panel.
	Single audio display. To set audio single for highlighted channel only, press the Audio button on the front panel.
	Mixed audio display
	Indicates that alarm is set. To set the alarm function, press the Alarm button on the front panel.

	Indicates that alarm output is activated.
	Indicates that lock function for a remote control is set.
	Alarm indicator. When there is an alarm (sensor or motion alarm) in the video channel, this icon will be highlighted bright red.
	Indicates that a network client is connected to the DVR.
	Indicates that sequencing mode is enabled.

Table 4.1.2. Button functions in LIVE screen

BUTTON	DESCRIPTION
	Select channel to be displayed in full screen mode.
	Switch between full screen and quad display mode.
SEQ	Press to start auto sequencing of the screen in full screen mode. (Toggle)
RECORD	Press to start and stop manual recording.
SEARCH	Press to go to the search menu. Event search /Time line search /Log /Archive search
BACKUP	Press to capture a still image. The still image will be stored into hard drive. It can be transferred to the USB device or CD title.
PTZ	Press to control PTZ operation
SETUP	Press to launch SETUP menu.
ESC	Press for temporal storage of the changed value or to return to the previous menu screen.

4-2. SEARCH screen

Press the SEARCH button in live mode to enter SEARCH screen.

The password screen will appear as in figure 4.2.1. And then, SEARCH screen(figure 4.2.2) will be appeared after input the right password.

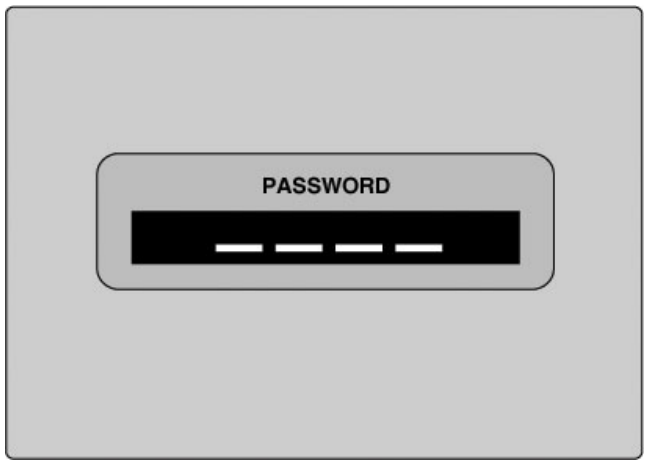


Figure 4.2.1. Password screen



Figure 4.2.2. SEARCH screen

4-2-1. TIME LINE Search

The TIME-LINE SEARCH screen is used to find the stored video by using the time line bar. (Figure 4.2.3)

1. Select the date of the video to begin searching by using the LEFT or RIGHT button to navigate through the day.
2. Once you have selected the date, press the SEL button to move to the TIME LINE SEARCH screen.
3. Use the LEFT or RIGHT button to select a time zone on the 24hours time table. Once you have selected the time zone, press the DOWN button to move to the 60 minutes time table and select all or each channel for playing back the recorded video.
4. Once you select the time zone, then move the time line select Bar(yellow) to the point you wish to start playing video (recorded video is indicated by a Red underline) by using the LEFT or RIGHT button.
5. Press the SEL button to playback the recorded video.
6. Press the BACKUP button to archive the video into USB stick or CD media.

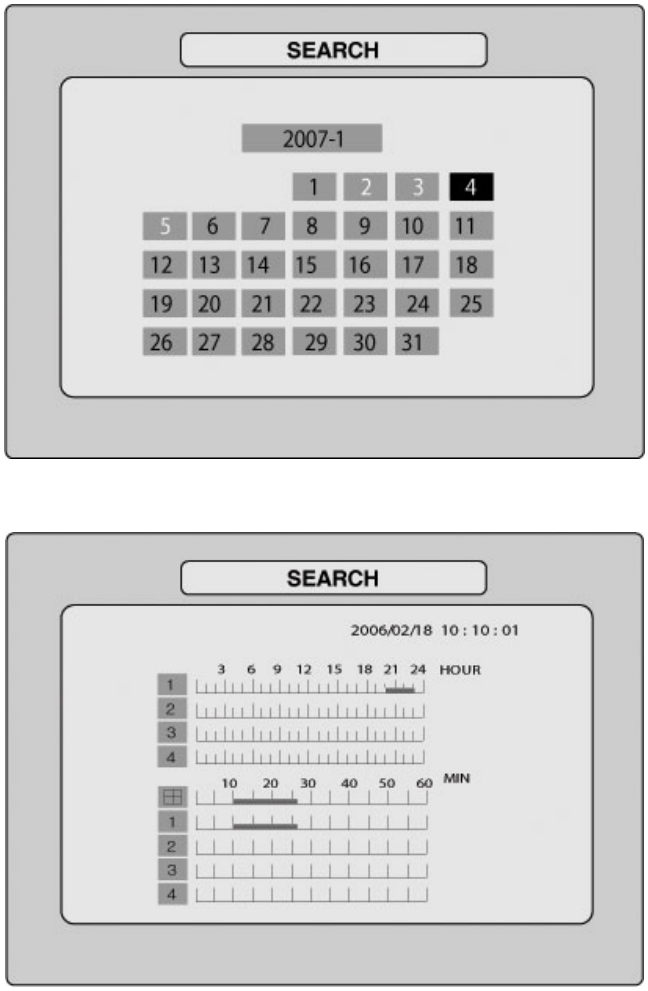


Figure 4.2.3. TIME LINE SEARCH screen

4-2-2. EVENT Search

The EVENT SEARCH screen is used to find the stored video. 3 categories of search filters can be applied: **DATE, CHANNEL, and TYPE**. Use the SEL button to move down the categories and use the UP button to move up the categories. The ESC button will return user to the live screen.

Searching for an event:

1. Select the date of the video to begin searching, Use the LEFT or RIGHT button to navigate through the day. Use the UP or DOWN button to change the values.
2. Once you have selected the date, press the SEL button to move to the CHANNEL selector.
3. Use the LEFT or RIGHT button to change the channel selection from ALL to any of the four available channels.
4. Once you have selected the channel, press the SEL button to move to the TYPE selector.
5. Use the LEFT or RIGHT button to change the type of recording to A(All), M(Motion), S(Sensor),

R(Manual), C(Continuous).

6. Once you have selected the type of recording to search for, press the SEL button to produce a list of instances that fit the search criteria.

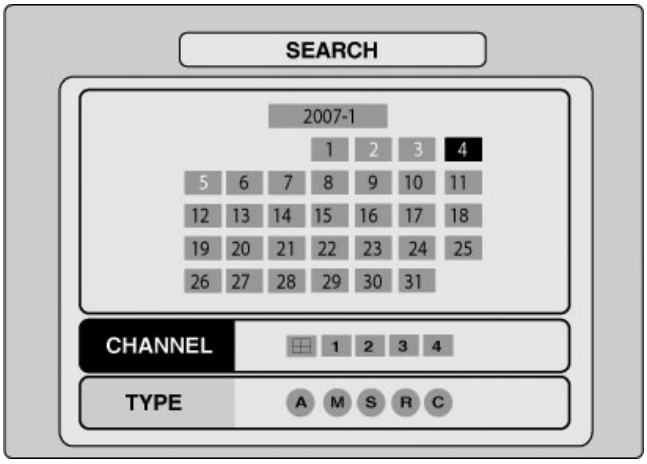


Figure 4.2.4. EVENT SEARCH screen

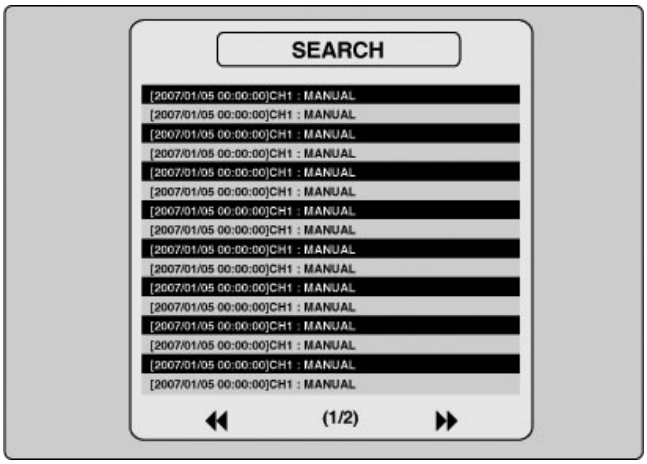


Figure 4.2.5. EVENT SEARCH LIST screen

7. Use the UP and DOWN button to scroll through the onscreen listings.
8. Use the LEFT and RIGHT buttons to display events that happened previous to or after the current selection.
9. Once the desired event has been selected, press the SEL button to playback the selected video.
10. Press the BACKUP button to archive the video into USB stick or CD media.

4-2-3. GO TO

You can search for specified data by setting the time and date in this menu. Use the LEFT or RIGHT button to move from left to right in this menu. Use the UP or DOWN button to set the date and time.

Figure 4.2.6. GO TO SEARCH screen

4-2-4. GO FIRST

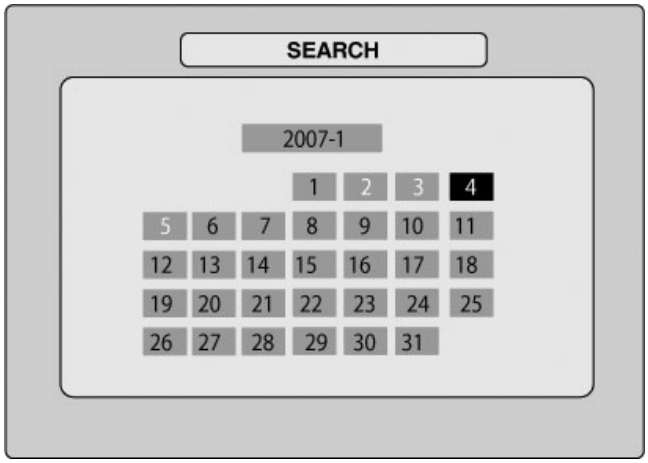
You can access to the first data which has been recorded into USB Stick or CD media by pressing this menu.

4-2-5. GO LAST

You can access to the last data which has been recorded into USB Stick or CD media by pressing this menu.

4-2-6. LOG List

You can see the log list by selecting this item. Figure 4.2.7



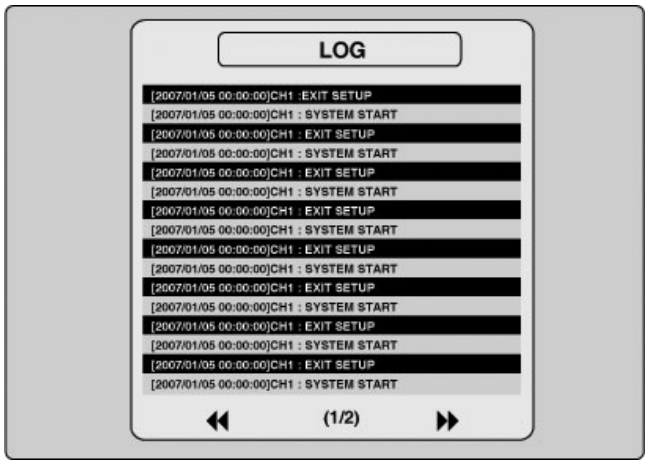


Figure 4.2.7. LOG LIST screen

4-2-7. ARCHIVE Search

The ARCHIVE SEARCH screen (figure 4.2.8) is used to find the stored video.

1. Select the date on the calendar to begin searching by using the LEFT or RIGHT button.
2. Once you have selected the date, press the SEL button to move to the list of recording data. (figure 4.2.9)
3. Use the UP or DOWN button to scroll through the onscreen listings.
4. Once the desired event has been selected, press the SEL button to see the selected video in paused mode.
5. Press the BACKUP button to archive the still image or video into USB memory stick or CD media.

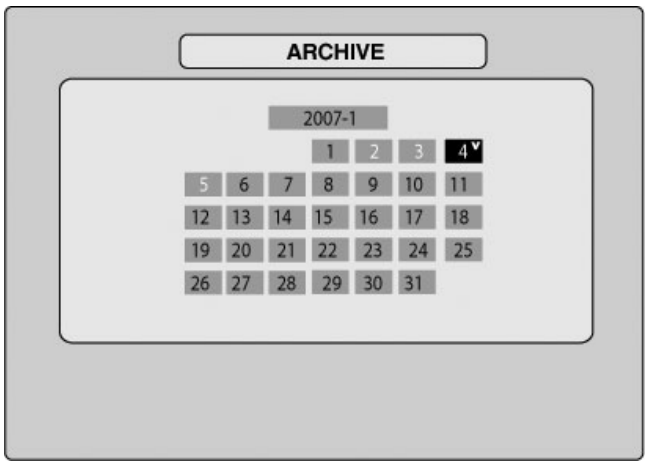


Figure 4.2.8. ARCHIVE SEARCH screen

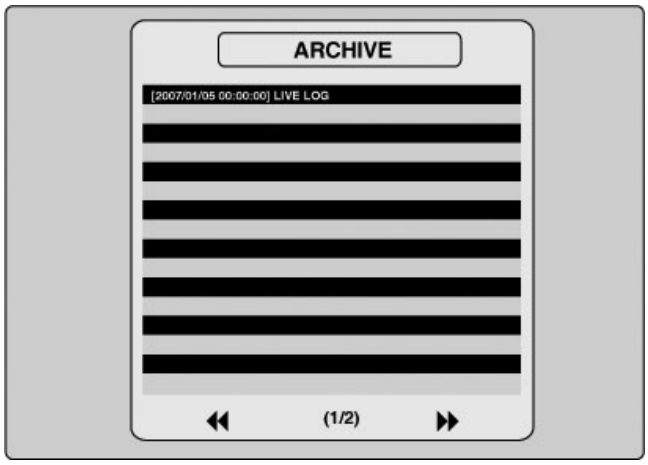


Figure 4.2.9. ARCHIVE SEARCH LIST screen

4-3. PTZ operation

To operate the PTZF functions, connect the controller to the RS-485 port on the rear panel. (figure 4.3.2)

In the PTZ control setting in the SETUP menu (refer to the figure 3.4.5 on page 26), user can select or set the protocol type of the camera which is the same as the one that is installed on the site. If the camera has a specific camera ID, select the camera ID using Left or Right button.

The PTZ function button is found on the front panel. Once you press the PTZ button, the screen will appear as in figure 4.3.1. Highlight the item to select and control the cameras by using the UP and DOWN or LEFT and RIGHT buttons. Please refer to the table 4.3.1. for description.

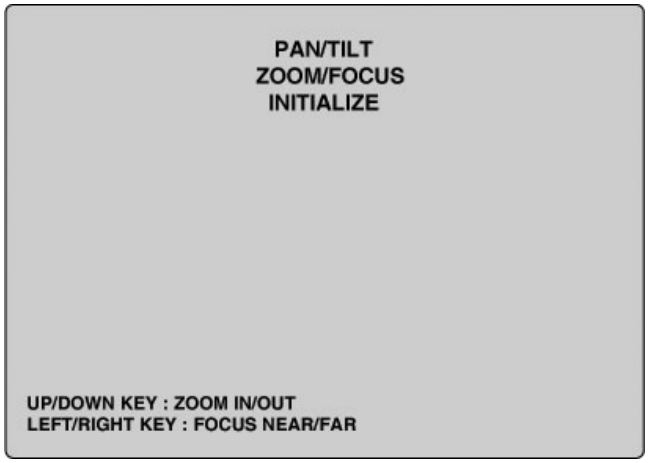


Figure 4.3.1. PTZF control screen

Table 4.3.1. Button functions in PTZF control

ITEM	DESCRIPTION
PAN / TILT	Use the UP or DOWN button for TILT and LEFT or RIGHT button for PAN of the selected camera.
ZOOM / FOCUS	Use the UP or DOWN button for ZOOM in or out and LEFT or RIGHT button for FOCUS near or far of the selected camera.
INITIALIZE	Initialize the PTZ settings of the selected camera.

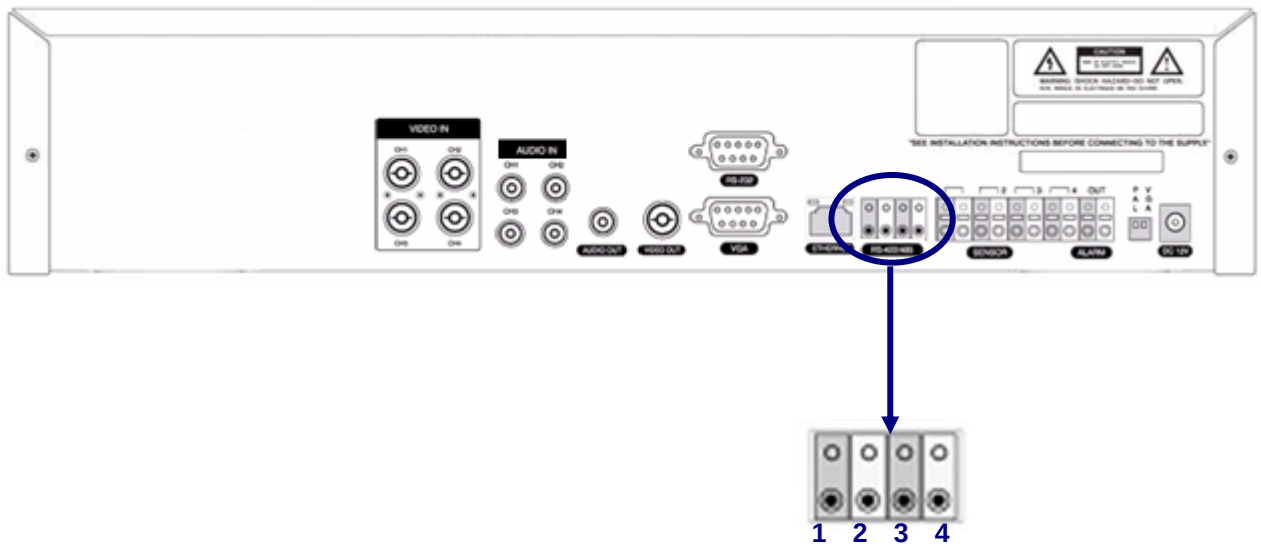


Figure 4.3.2. RS-422/485 port

Table 4.3.2. Description of RS-422/485 port

No.	Description	
Classification	RS-422	RS-485
1	RX+ (+ Transmit data)	Data +
2	RX- (- Transmit data)	Data -
3	RX+ (+ Receive data)	
4	RX- (- Receive data)	

4-4. PLAYBACK mode

During the playback of a recorded event, the mode changes from SEARCH to PLAY. While in PLAY mode, you may return to SEARCH LIST by pressing the ESC button. Playback starts in quad mode with channel 1 highlighted by default. If audio is enabled, it will only play from the highlighted channel.

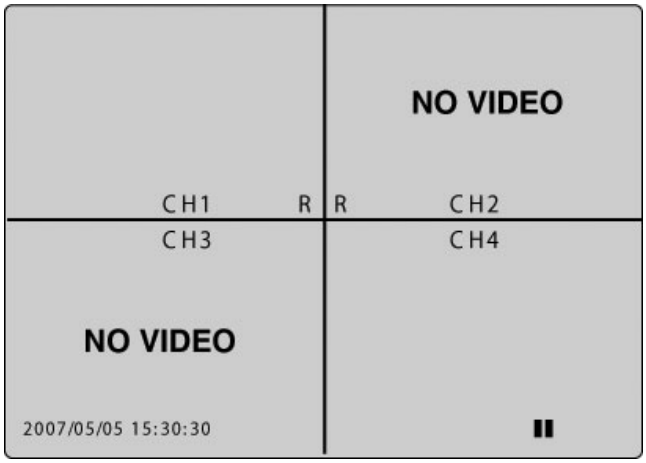


Figure 4.4.1. PLAYBACK mode screen

Table 4.4.1. Button functions in PLAYBACK mode

BUTTON	DESCRIPTION
ESC	Return to the previous menu screen, search list, or exit menu
◀◀ REW	Press to rewind the footage at 1x, 2x, 4x and 8x speeds. Reverse playback speed is shown as -1x (normal), -2x (2 times normal), -4x (4 times normal) and -8x (8 times normal) at the bottom right of the screen.
••◀ F/REW	Jump/Step backward. – The playback position moves 60 seconds backward.
PLAY/PAUSE	Press to play or pause recorded video.
F/ADV ▶••	Jump/Step forward –Playback position moves 60 seconds forward.
FF ▶▶	Press to fast forward the footage at 1x, 2x, 4x and 8x speeds. Playback speed is indicated as +1X, +2X, +4X and +8X for normal, twice, 4 times and 8 times of the regular speed at the bottom right of the screen.
1	Select channel 1 to be highlighted.
2	Select channel 2 to be highlighted.
3	Select channel 3 to be highlighted.
4	Select channel 4 to be highlighted.

SEL	Switch view between quad and full screen mode displaying highlighted channel.
BACKUP	Press the BACKUP button to archive the still image or video clip into USB stick or CD media.

5. Archiving Video

You can archive a still image or video clip to a USB stick or CD media and hard drive.

5-1. Capturing and transferring still images or video onto USB or CD media.

STILL IMAGE ARCHIVE

Still images can be captured and archived onto the USB stick, CD media or hard drive in live mode or while playing back recorded video. In LIVE mode, press the BACKUP button to launch the archive function. When you press BACKUP button, the archiving screen will display as Figure 5.1.1. And the DVR will ask which media you will take for archiving as Figure. 5.1.2.

Once you select the media, the system will start to archive the data to the selected media.

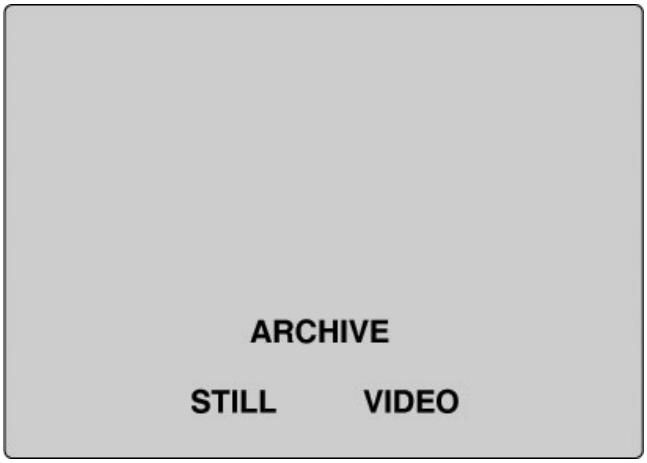


Figure 5.1.1. STILL IMAGE Archiving Screen

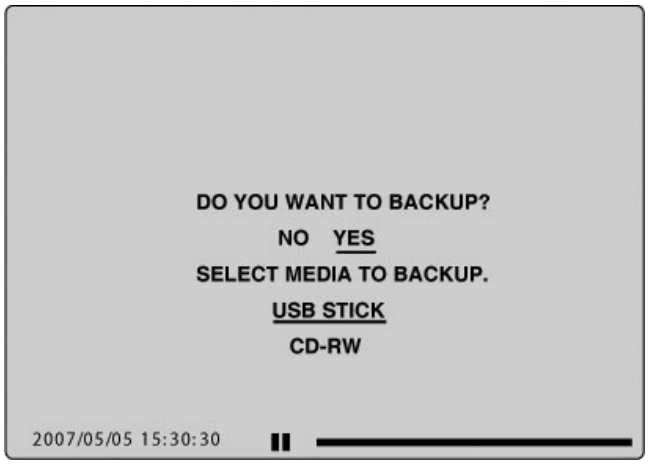


Figure 5.1.2. MEDIA Select Screen

VIDEO ARCHIVE

Video can be captured and archived onto the USB stick or CD media or hard drive while playing back recorded video. In playback mode, press the BACKUP button to launch the archiving function. When you press BACKUP button, the DVR will ask whether to archive a Still Image or Video clip as Figure 5.1.3.

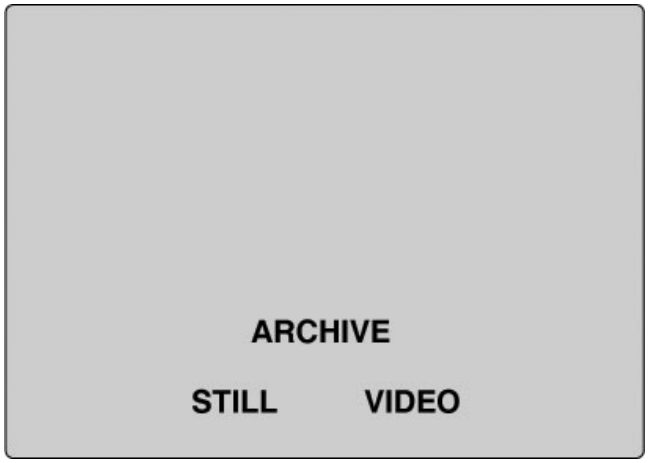


Figure 5.1.3. ARCHIVE Mode Screen

If user selects VIDEO, the DVR will ask for the setting of the archiving duration as Figure. 5.1.4.

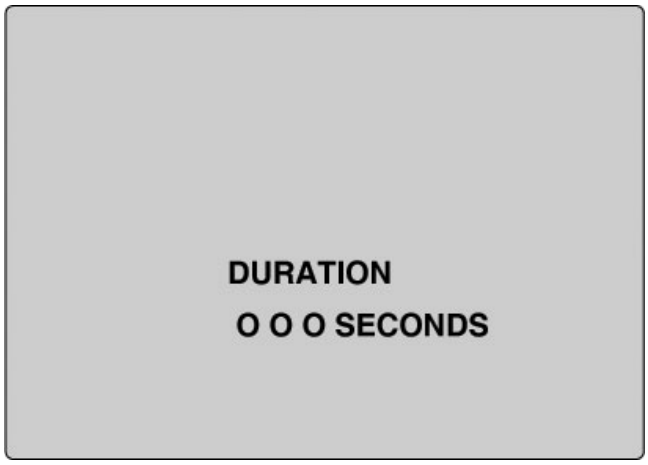


Figure 5.1.4. ARCHIVING DURATION Setting Screen

Then DVR will ask which media you will take for archiving as Figure. 5.1.2.

Once you select the media, the system will start to archive the data to the selected media.

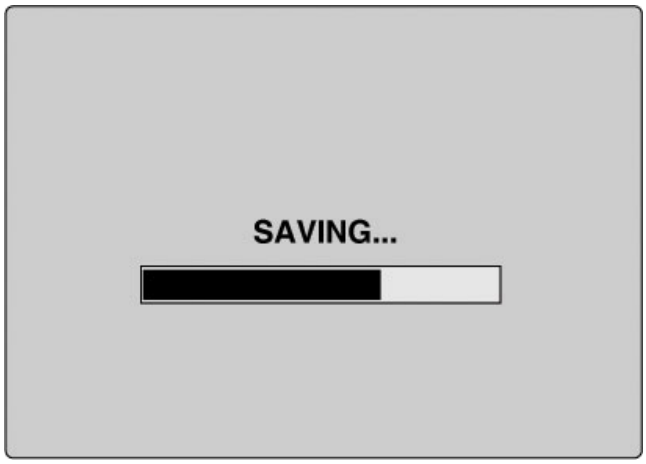


Figure 5.1.5. ARCHIVE Ongoing Screen

The DVR will convert the corresponding portion of the video into an AVI file.

5-2. Transferring still images or video from the ARCHIVE list

The stored data onto hard drive will be found in the ARCHIVE list in SEARCH menu. (Figure 5.2.1)

User can back up still images or video into the storage device from the ARCHIVE list.

1. Select the date to begin searching by using the LEFT, RIGHT, UP and DOWN buttons to navigate through the days. (Figure 5.2.2)
2. Once you have selected the date, press SEL to open the list of stored data.
3. Use the UP and DOWN buttons to scroll through the on-screen listings. (Figure 5.2.3)
4. Use the LEFT and RIGHT buttons to display a list of stored events that happened previous to or after

the current selection.

5. Once the desired event has been selected, press SEL to view the still image or the first frame of the selected video.
6. Press the BACKUP button to launch the archiving function in playback mode.
7. See the Chapter 5-1 for archiving procedure.



Figure 5.2.1. SEARCH menu screen

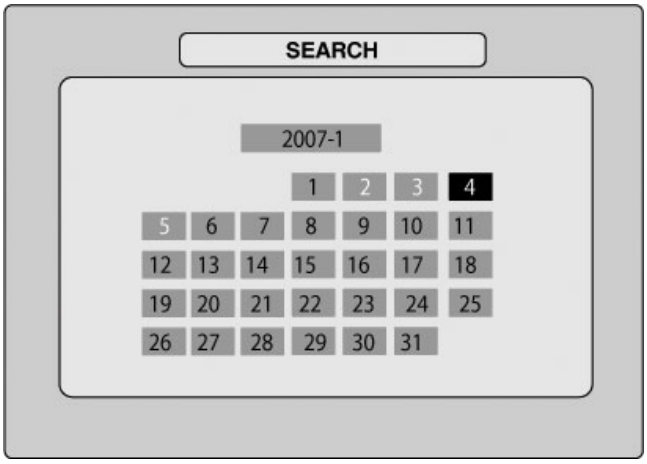


Figure 5.2.2. ARCHIVE Search Screen



Figure 5.2.3. ARCHIVE LIST Screen

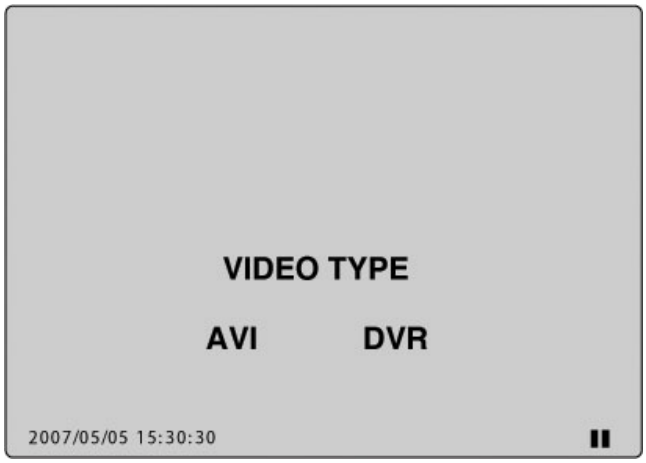


Figure 5.2.4. VIDEO TYPE Select Screen

In the case of video, the system will change the video and audio into AVI format while transferring the video file into the storage device.

NOTICE

During the backup, the DVR will operate in Simplex

5-3. Playing AVI video from USB memory stick or PC through Network S/W

If there is proper CODEC installed in PC, it is possible that the backup data can not be play-backed. In case of that the backup data in USB device is not properly play backed in multi-media S/W on PC, user need to install ‘ffswhow’ CODEC that can download it from open sites.

6. Upgrading Firmware

In order to upgrade, the firmware upgrade file must

7. Network – By an exclusive viewer

The DVR provides a live remote monitoring feature. Remote monitoring requires installation of a software client program on your PC.

NOTICE

In a high bandwidth network, a maximum of four users can access one DVR simultaneously. In a low bandwidth network it is recommended that only one user access the DVR at a time.

For remote viewing, the frame rate is limited to 1 frame/sec when there is no recording operation in the DVR. When the DVR is recording, the video frame rate for remote live monitoring will follow the recording frame rate on the DVR.

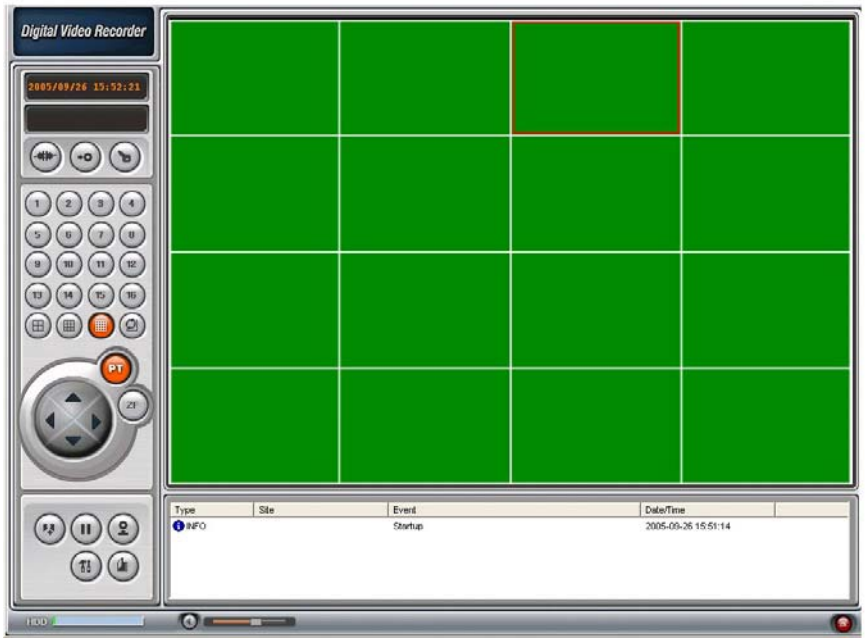


Figure 7.1. Main user interface

7-1. Overview

The remote software supports remote live viewing, search, playback and system configurations.

By installing the Network Client Viewer on a Windows PC, you can monitor real-time and recorded images via optional Ethernet network.

7-2. Minimum PC requirements

PC Specification	Minimum Requirement	Recommended
CPU	Intel Pentium Ⅲ	Intel Pentium Ⅳ
	500Mhz	2Ghz
Memory	128MB	256MB
VGA	16MB	64MB
Resolution	1024x768	1024x768
Disk space	10MB	10MB
OS	Windows 2000	Windows 2000, Professional, XP Vista
Network	10/100Base T	10/100Base T
Others	Direct X 8.1	Direct X 9.0 or Higher

Before installing the program, check the PC specifications. The Network Client Viewer may not perform correctly if the PC does not meet the minimum requirements.

7-3. Installing the program

1. Insert the provided CD into the CD-ROM drive of your PC.
2. Run 

to start the installation process.
3. Follow the on-screen directions.
4. Double click the 

icon to start the program.

7-4. Live viewer

When installation is complete, double click the 

icon on your desktop to start the program.

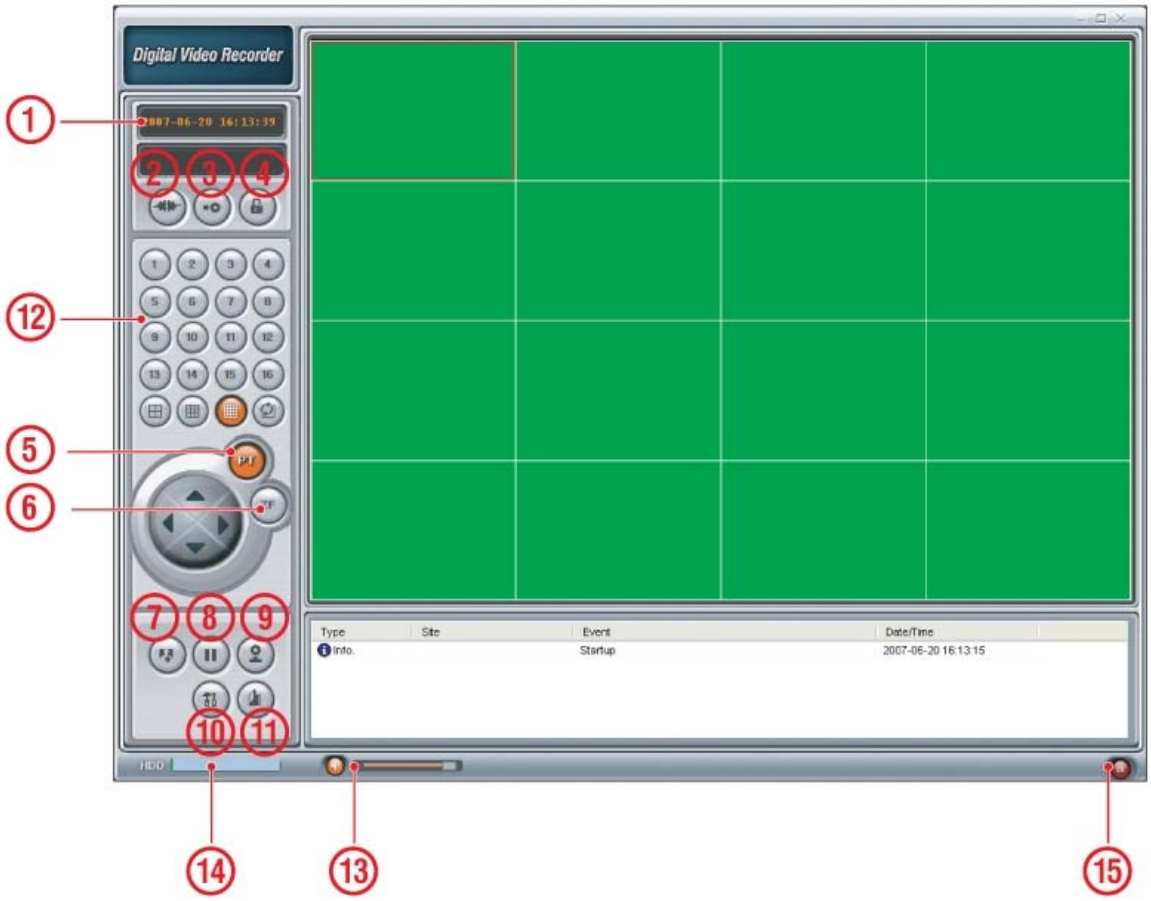
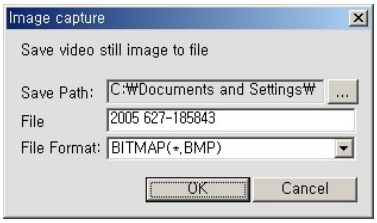


Figure 7.4.1. Main user interface

Table 7.4.1. Main controls in Live

NO	Button	Description
1	**DATE & TIME**	Displays the current date and time.
2	**CONNECT**	Click this icon to connect to the DVR
3	**SEARCH**	Click this icon to search for recorded video.
4	**LOCK/ UNLOCK**	Click this icon to lock/unlock all operations of the client software. Once the lock or unlock icon is clicked, this pop up window appears. Remember the password and enter it when you operate the client software.

5	**PAN/TILT**	Use these buttons to control the PAN/TILT features on the remote camera.
6	**ZOOM/ FOCUS**	Use these buttons to control the ZOOM/ FOCUS features on the remote camera.
7	**CAPTURE**	Click this icon to capture a still image. Once the capture icon is clicked, this pop-up window appears. The still image is captured in either jpeg or bmp file format. 
8	**PLAY/PAUSE**	Click this icon to play/pause live video.
9	**RECORD**	Enable or disable recording of live video to local disk.
10	**SETUP**	Click this icon to setup configuration of client software.
11	**EXIT**	Click this icon to exit the client software.
12	**DISPLAY MODE**	Click these icons to select display mode.
13	**AUDIO**	Use the volume control bar to set the audio level. The audio can be turned on or off by clicking the audio icon.
14	**HDD USAGE**	DVR HDD storage Indicator.
15	**ALARM**	The alarm output indicator lights up for 5 seconds if alarm output is activated on the DVR.

7-5. Search and Playback Viewer

The search window can be accessed by clicking the search icon on the upper right of the main user interface.

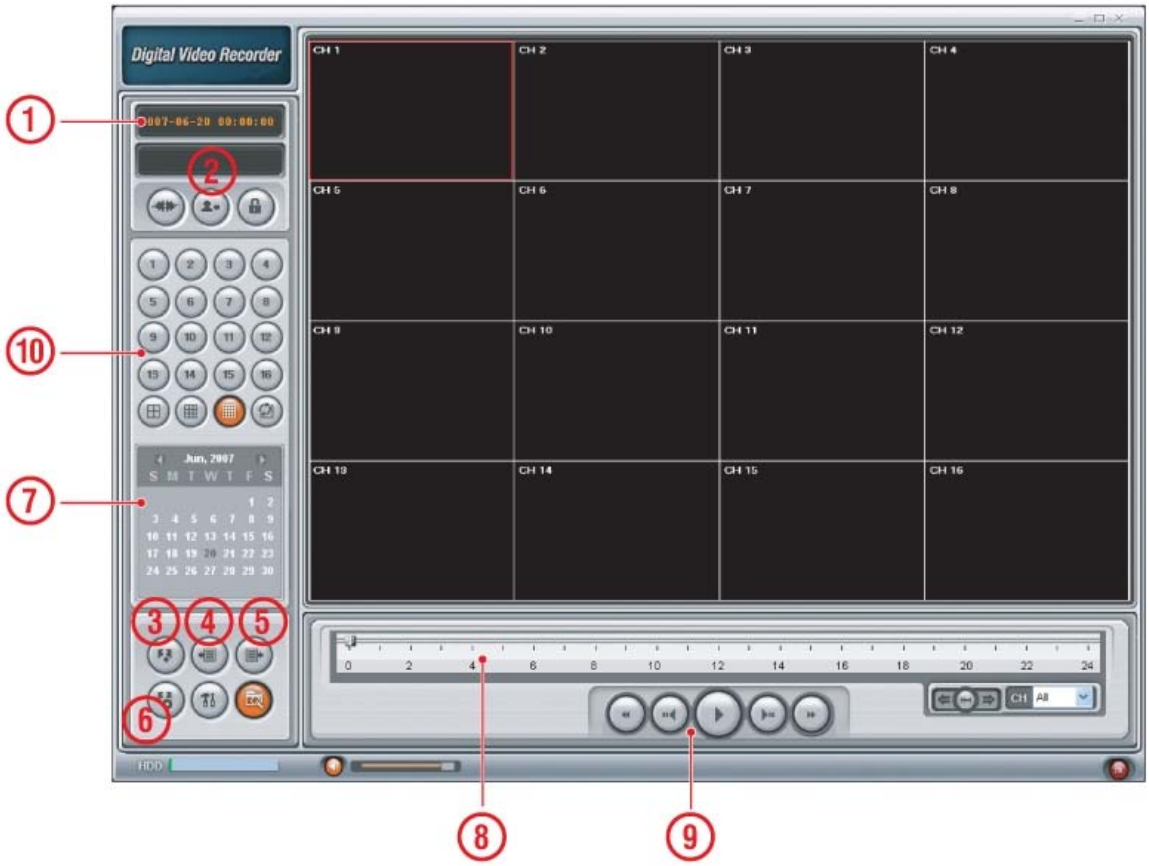


Figure 7.5.1. Main user interface

Table 7.5.1. Main controls in Search

No	Button	Description
1	DATE & TIME	Displays the recording time of the data selecte2 0 0 10.02 514.64912T/TT0 1 Tf10.2.02

7	**SEARCH CALENDAR**	The calendar shows dates with recorded video in a light blue and the selected date in dark blue.
8	**TIMELINE BAR**	The timeline shows recorded data in dark blue on the bar. You can adjust the time-line scale and move it to the time you wish to play back. Click the play icon to display the recorded video.
9	**PLAY BUTTONS**	
10	**DISPLAY MODE**	Click these icons to select display mode.

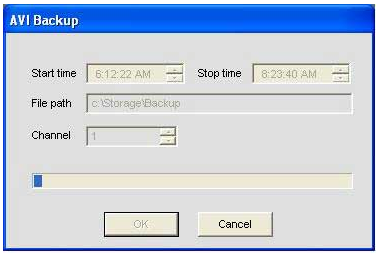
7-5-1. Backup

You can back up recorded video in AVI format from the search viewer.

1. Click the MARK IN icon  when the scale on the blue timeline is on the time you wish to the backup file to begin.

2. Set the ending time on the blue timeline by dragging the scale to the ending time for the backup file and clicking the MARK OUT icon  . The color of the timeline between the beginning time and ending time will change to dark green.

3. Next, click the backup icon  and the pop up window appears as below.



The beginning and ending time can also be set on this window.

After selecting a channel for backup, click the OK button. The backup will begin.

7-6. PC System configuration

Click the setup icon  to setup the configuration of PC that the network client S/W is installed.

7-6-1. General

Once you click the setup icon, this pop up window appears. Select security options and set a password. When you access any of the selected functions, you will need to enter the password.

You can also set the save path for capturing and backup.

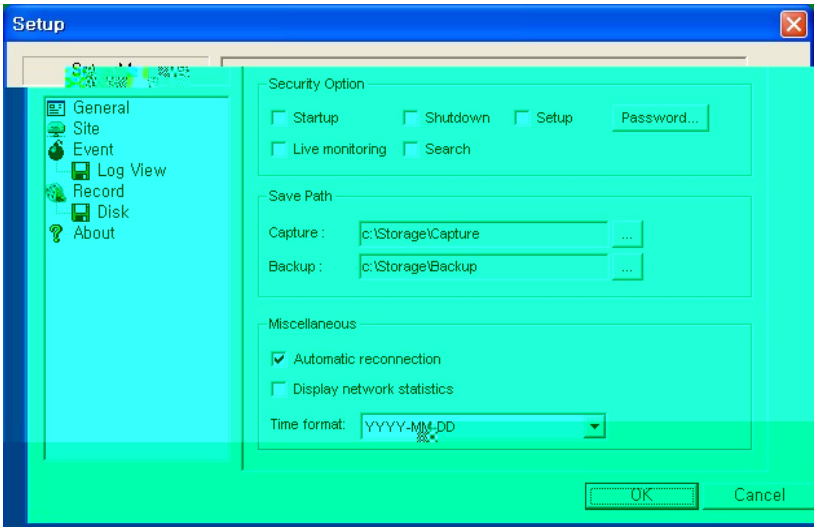
Security Option: Set a password for security options.

Save Path: Specify the location to record the receiving video for Backup and still image for Capture.

Automatic reconnection: If a user selects this function, the client S/W will automatically try to connect to the previously connected IP address if the network connection is lost.

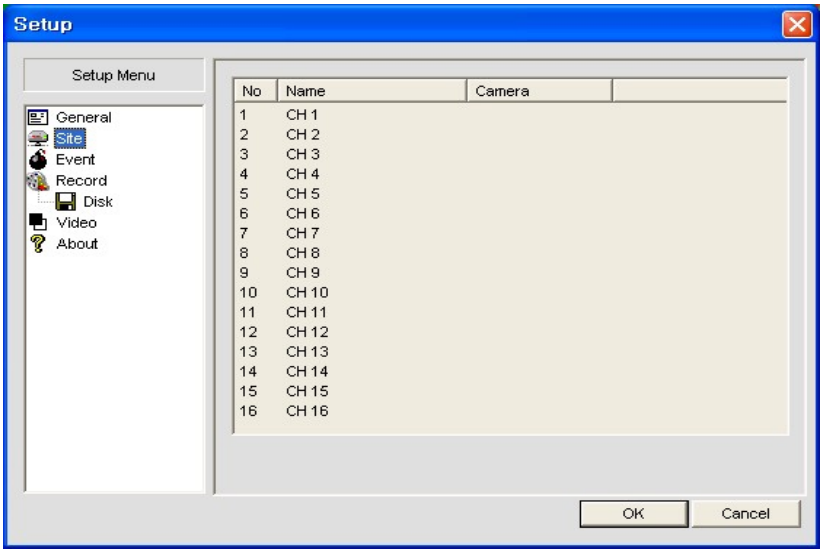
Display network statistics: If a user selects this function, the client S/W will display network status, Bit rate and Frame rate.

Time Format: Change the way the Client software displays the time.



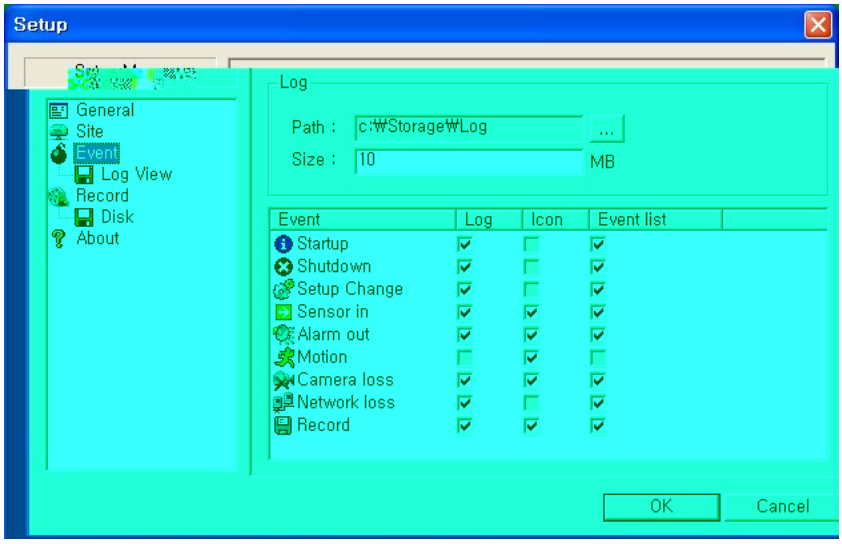
7-6-2. Site

This option shows the channel information of the DVR and allows you to change the channel title.



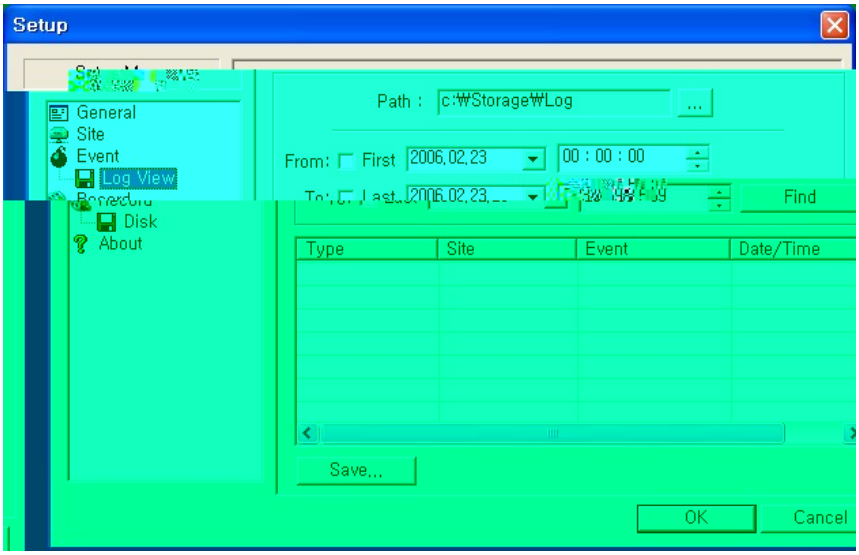
7-6-3. Event

You can set event items, the amount of local disk space you want to allow and the save path for the log file.



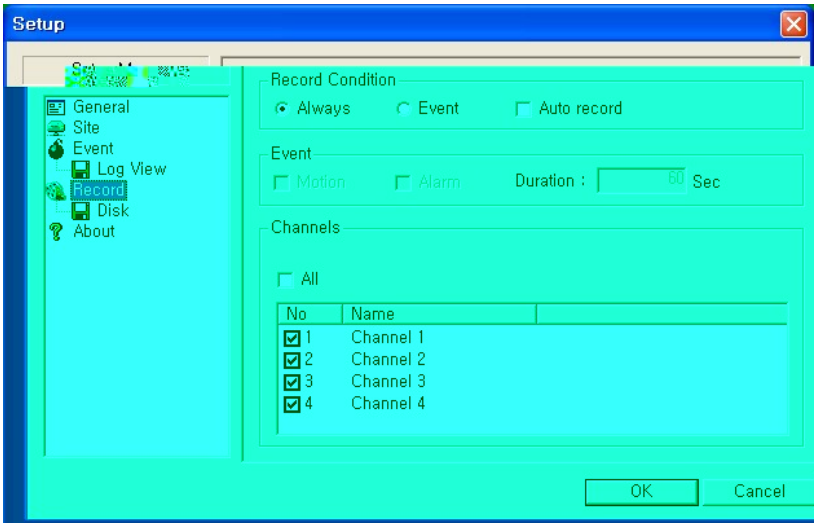
- LOG – Select to save event log into ‘log file’.
- ICON – Select to display the event on live video.
- EVENT LIST – Select to show the event in the ‘Event List” window of live mode.

You can search and check the recorded log data.

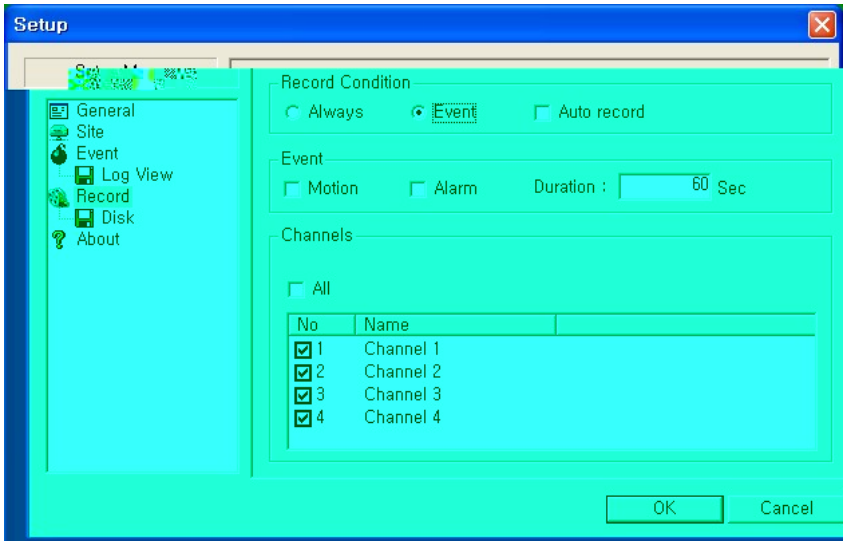


7-6-4. Record

You can set the recording conditions for Always, Event, or Auto recording. You can also select individual channels or all channels to record.

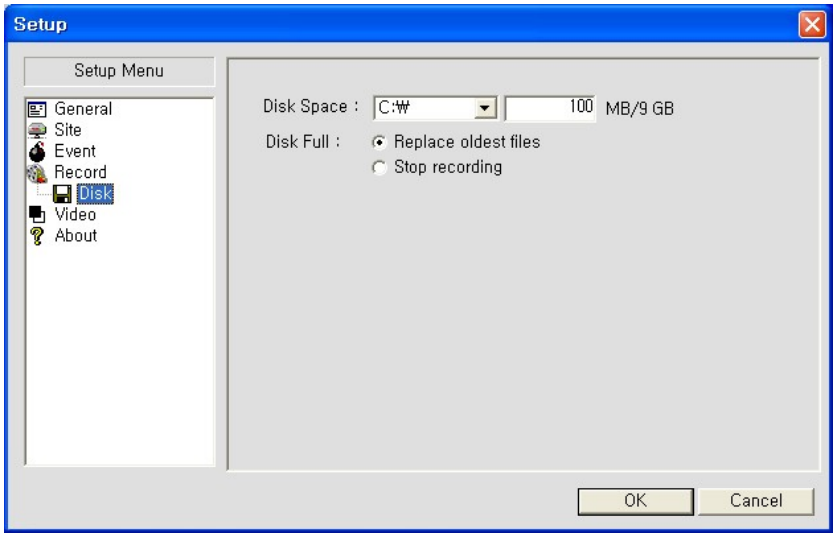


When you set the recording condition to Event, you can set event for motion or alarm with duration. You can also set each or all channels to record.



7-6-5. Disk

You can select which local disk to use and the amount of disk space you want to allow the program to use for recording. You can also choose to overwrite data or stop recording when the maximum amount of disk space is full.


Setup
Setup Menu
General
Site
Event
Record
Disk
Video
About
Disk Space :
C:₩
100
MB/9 GB
Disk Full :
Replace oldest files
Stop recording
OK
Cancel

8. Network – By an web-browser viewer

The DVR provides a live remote monitoring feature by web-browser viewer.

8-1. Download Web Brower Viewer and Connection

1. User needs to access http://anytimeview.com/ to get a web browser viewer. Then the window will appear as bellow. Click “YES” to download Web Browser Viewer from the server run by the manufacturer.

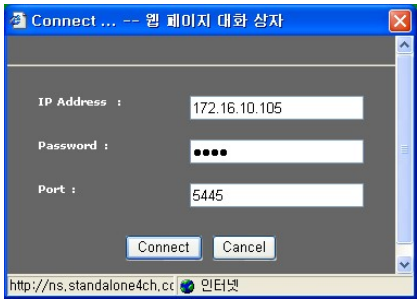


2. Web Browser Viewer will be downloaded and installed.

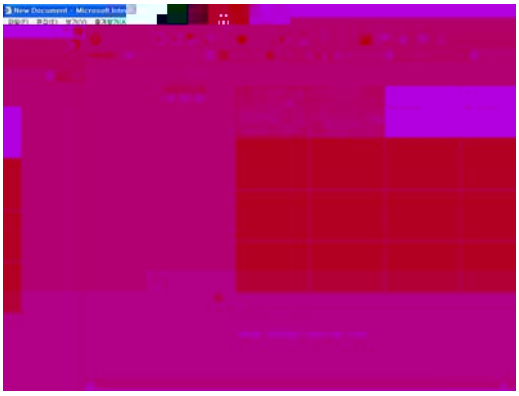


3. Click 

button and enter IP address (or Domain name using DDNS), the password, and Port number.



4. Then user can access DVR.



8-2. Main Features

8-2-1. Live

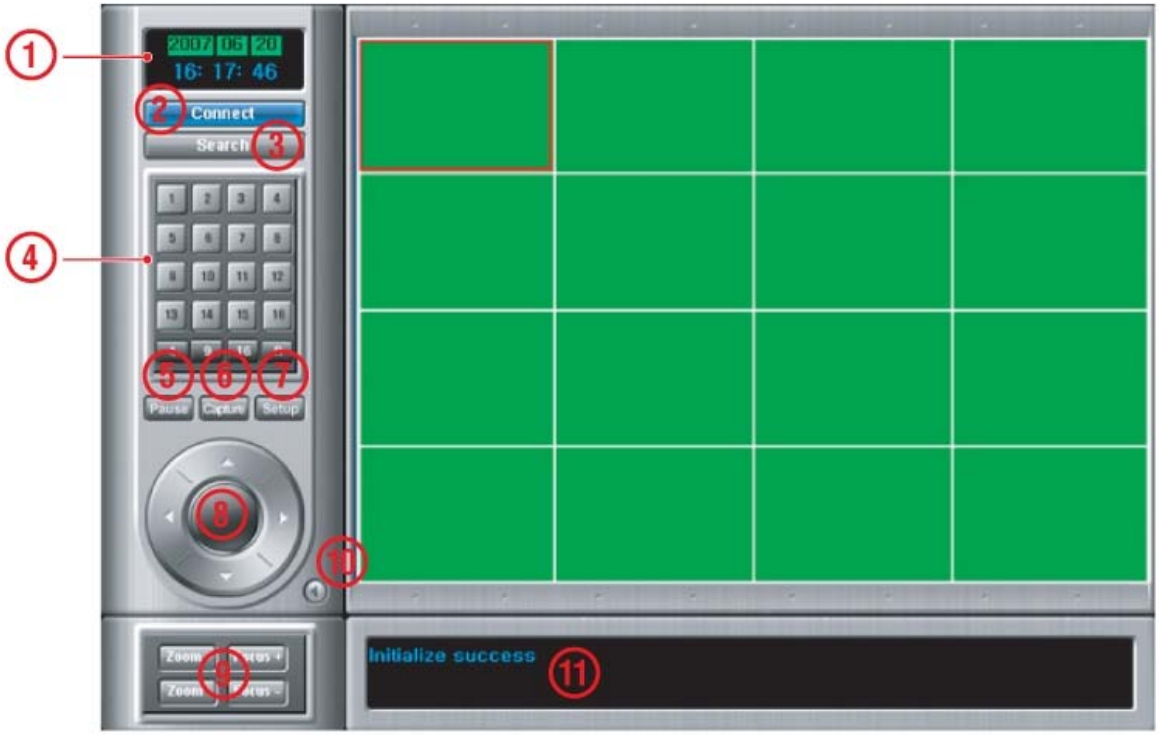


Figure 8.2.1. Main user interface - Live

Table 10.2.1. Main controls in Live

No	Name	Description
1	**DATE & TIME**	Displays the current date and time.
2	**CONNECT**	Click this icon to connect to the DVR
3	**SEARCH**	Click this icon to search for recorded video.

4	**LIVE DISPLAY MODE**	Click these icons to select display mode.
5	**PAUSE**	Click this icon to pause the display screen.
6	**CAPTURE**	Click this icon to capture the image from live display.
7	**SETUP**	Click this icon to control remotely the setting of DVR.
8	**PAN/TILT**	Use these buttons to control the PAN/TILT features on the remote camera.
9	**ZOOM/FOCUS**	Use these buttons to control the ZOOM/ FOCUS features on the remote camera.
10	**AUDIO**	The audio can be turned on or off by clicking the audio icon.
11	**CONNECTION STATUS**	Shows the client connection information.

8-2-2. Search and Playback

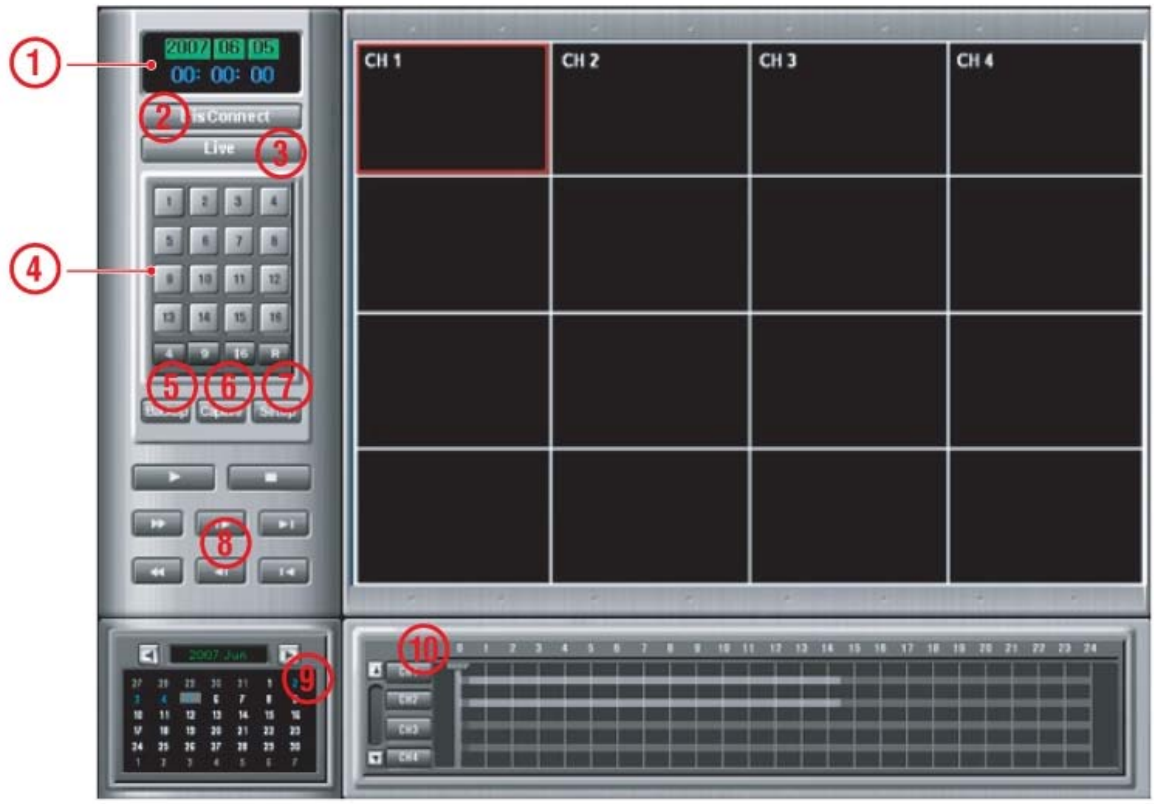


Figure 8.2.2. Main user interface – Search & Playback

Table 8.2.2. Main controls – Search & Playback

No	Name	Description
1	**DATE & TIME**	Displays the current date and time.
2	**Connect/Disconnect**	Click this icon to connect to the DVR

3	**LIVE**	Click this icon to search for recorded video.
4	**DISPLAY MODE**	Click these icons to select display mode.
5	**BACKUP**	Click this icon to pause the display screen.
6	**CAPTURE**	Click this icon to capture the image from playback.
7	**SETUP**	Click this icon to control remotely the setting of DVR.
8	**PLAYBACK BUTTONS**	Use these buttons to control the PAN/TILT features on the remote camera.
9	**SEARCH CALENDAR**	Use these buttons to control the ZOOM/ FOCUS features on the remote camera.
10	**Timeline Search Window**	The audio can be turned on or off by clicking the audio icon.

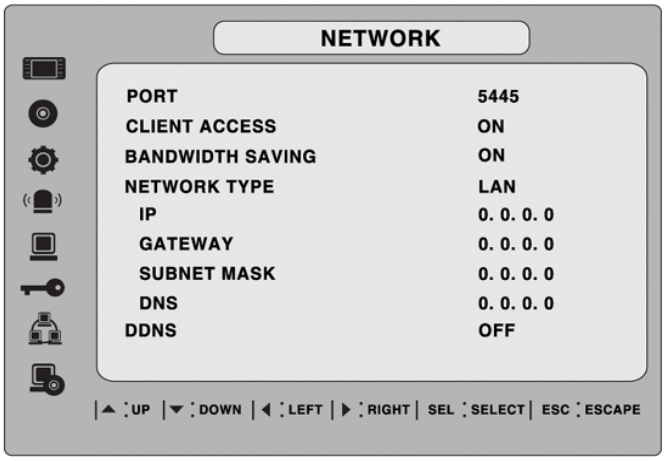
APPENDIX

1. How to register DDNS (Dynamic Domain Name Server)

If DVR is installed in network using dynamic IP addressing and user want to access DVR with domain name instead of IP address, user should register DVR and domain name with DDNS.

1-1. Setting of NETWORK Setup menu

A. Please go to SETUP>NETWORK. There are three network types such as DHCP, ADSL, and LAN.



B. Please select proper network type and set DDNS as ON.

DHCP: Select when DVR is installed in Local Network with router or IP sharer and IP address is automatically assigned by the DHCP server.

LAN: Select when DVR is installed in Local Area Network with router or IP sharer and IP address is static and private IP address.

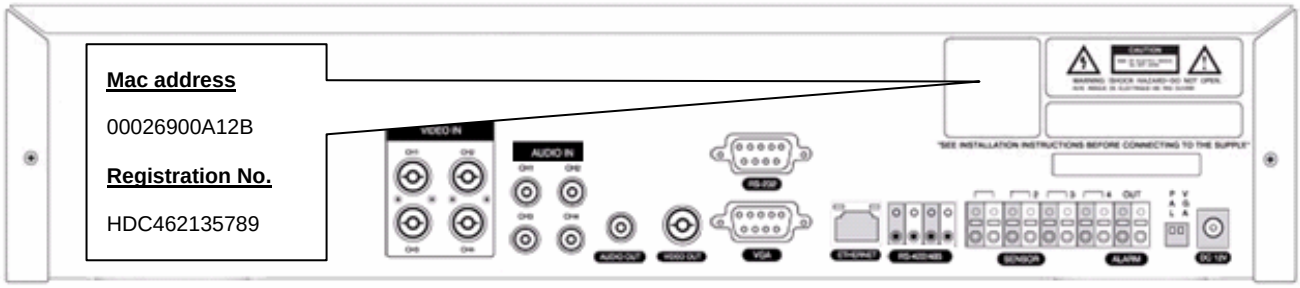
ADSL (PPPoE): Use this ADSL (PPPoE) function when the network type connected to DVR is PPPoE method.

If ADSL type is not using inputting IP and Password like VDSL or DVR is installed in IP sharer, a user can not select this function. In this case, a user should select DHCP or LAN.

C. Please make sure DNS SERVER NAME should be "**ddnscenter.com**".

1-2. Checking Mac address on the rear panel of DVR and Serial Number

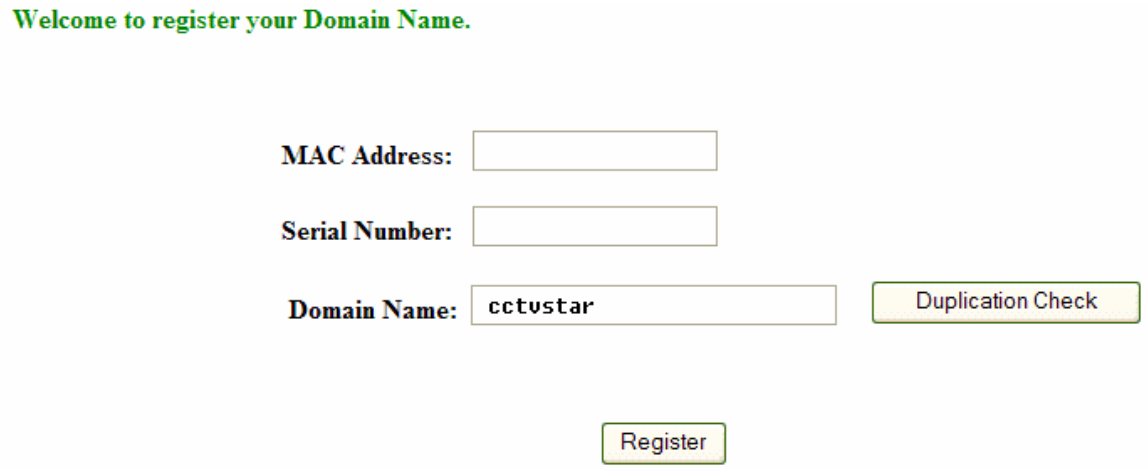
Please check the Mac address and Serial Number on the rear panel of the system.



NOTE: If there is not registration No. on the system, please contact the distributor or manufacturer.

1-3. Registration at DDNS

Please go to http://ddnscenter.com



Input MAC Address and Serial Number that you checked from the rear of DVR. And input Domain Name and press [check] to see if Domain name is usable or not.



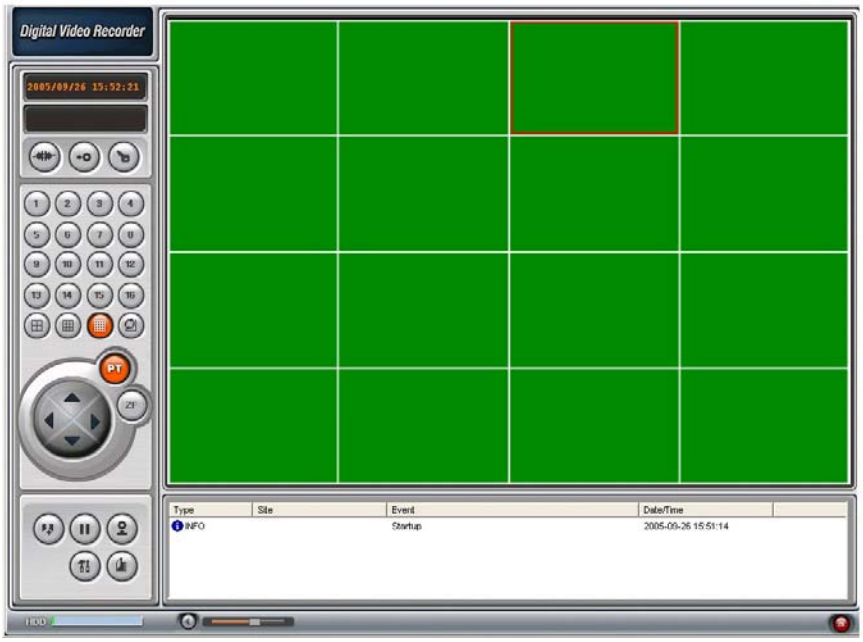
NOTICE

You may use alpha and numerical characters as well as hyphens for your Domain name. (i.e. [A~Z], [a~z], [0~9] or [-] for your domain name and it is case sensitive).

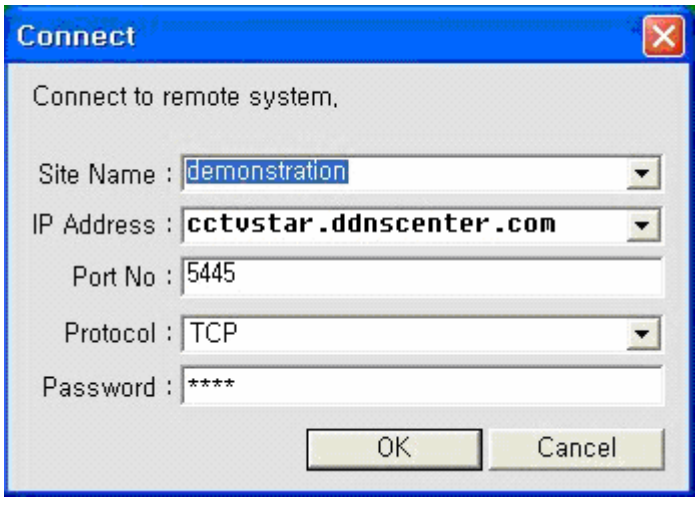
2. Network access using Domain name

If DDNS registration is successful, you can access your DVR via the provided Network Client S/W.

A. Run Network Client S/W program and click the “connect” button.



B. Enter your domain name instead of IP address in the “IP Address” field.



C. Enter the Port No., Protocol and Password in each filed.

D. Press OK, then you can access to the remote DVR.